

EXAMINING STYLE CONSUMPTION IN THE  
CONTEXT OF PRODUCT LONGEVITY

By

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CONTEXT OF PRODUCT LONGEVITY

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Abstract: The importance of extended product lifespan for sustainable clothing consumption has been established by many researchers. However, assuring extended lifespan is difficult since consumers' desire for novelty fuels premature disposal and frequent replacement of clothing products, thereby shortening their lifespan. Therefore, promoting sustainable consumption by extended usage of clothing presents both a unique challenge and an opportunity. Recently, style consumption (SC) has been identified by some researcher in the exploration of sustainable clothing consumption. SC is a type of personal style behavior defined as consistency in style use as opposed to constant change over time. However, theoretical understanding of SC is limited. This study extends the under-researched area of SC by highlighting personal values that characterize individuals' consumption behavior and their style. Consumption behavior was investigated in cases where consumers reported product longevity (utilizing wardrobe for at least ten years). This qualitative study follows means-end theory connecting desired product attributes with personal values. Several personal values such as self-expression, self-respect, achievement, protect planet, and hedonism were identified, suggesting participants' consumption choices are driven by egoistic and biospheric values. Besides, altruistic values were identified at the disposal phase of consumption. However, egoistic values were observed to be more dominant than biospheric and altruistic values. This is because, personal orientation or egoistic concern is central to the consumption motives and values related to personal style. What makes this study significant is that it investigated actual sustainable consumption behavior where consumers report product longevity with their clothing, rather than asking questions about style to those who may marginally adopt sustainable consumption behavior.

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## CHAPTER I

### INTRODUCTION

The last two decades have witnessed a rapid growth of textile consumption around the globe. The advent of fast fashion has made clothing products cheaper than ever by utilizing lower quality materials in clothing construction (Birtwistle & Moore, 2007; McLaren & McLauchlan, 2015). Fast fashion is defined as a fast-response system that produces low-cost clothing by mimicking high-cost luxury clothing (Fletcher, 2008). The low-cost clothing products can withstand only a relatively short cycle of use and thus lose wearability. For instance, the most frequently cited fast fashion retailer, Zara, introduced garments that were regarded as “clothes to be worn 10 times” (McAfee, Dessain, & Sjoeman, 2004, p. 4). As a result, clothing lifespan has become shorter. Short lifespan fuels the faster replacement of clothing products, thereby posing a threat toward sustainable consumption of clothing (Laitala & Klepp, 2015).

Sustainable consumption is defined as using resources to fulfill basic needs with an end goal of preserving surplus resources for future consumption (Jackson & Michaelis, 2003). Prior studies emphasized extending product lifespan in the context of sustainable consumption. Cooper (2010) argued that extended product lifespan is one of the prerequisites for sustainable clothing consumption. Likewise, Chapman (2015)

emphasized establishing extended lifespan to the principle of products' design when aiming for sustainable consumption. Although the extended product lifespan is a must for sustainable clothing consumption, it may not decrease frequent purchase of clothing, neither may it guarantee long-term use of clothing. This is because consumers use clothing as a communication tool (Jhonson, Schofield, & Yurchisin, 2002), in addition to a mean for covering their body (O'Cass, 2000). Consumers use clothing to facilitate the meaningful exchange of information about their identity (Jhonson et al., 2002). Consumers' desire for novelty prompts them to form new meanings or identities by purchasing new products (Kaiser, 1997), even though the existing products are still functioning. Therefore, promoting sustainable clothing consumption by extended usage of clothing presents both a unique challenge and an opportunity for researchers in the clothing discipline.

Recently, style has been identified by some researchers in the exploration of sustainable clothing consumption (Cho, Gupta, & Kim, 2015; Lundblad & Davies, 2016). Personal style is a distinctive mode of tailoring (Otnes & Zayer, 2012) or a certain way of dressing (Hebdige, 1979). Style consumption (SC) is a type of personal style behavior (Cho et al., 2015), in which the underlying concept of style lies in consistency over constant change (Mikkonen, Vicdan, & Markkula, 2014). Consistency occurs in identifying clothes reflecting a personal style that prevails for many fashion cycles regardless of the latest trends. Chosen this way, consumers are persuaded to reflect their taste in regards to their clothing in a relatively stable way without impulsively following the latest trends (Mikkonen et al., 2014). Thus SC refers to the behavior of adopting a personal style that is timeless but at the same time, enables expression of personal taste in

regards to clothing (Cho et al., 2015). This is what makes style consumption behavior distinct from personal style behavior. According to Cho et al. (2015), style-oriented consumers demonstrate fashion consciousness. By fashion consciousness, Cho et al. (2015) mean consumers' interest and awareness in current fashion not to pursue a trend instantaneously but to adopt a style that really communicates their identity and focuses on buying quality over quantity. Fashion consciousness inclines consumers to choose particular style that they can use for longer periods to reflect their identity (Cho et al., 2015). Thus, style has the potential to gear consumers' focus toward an extended usage of products resulting in product longevity (long lifespan of a product). Hence, a study on style consumption seems a good focus of attention, since it might provide additional understanding of sustainable clothing consumption practices.

### **Statement of the Problem**

According to Hawley (2006), the “very definition of fashion fuels the momentum for change, which creates a demand for ongoing replacement of products with something that is new and fresh” (p. 263). Nowadays, consumers dispose of clothing not only because of low quality and short lifespans but also because of the frequent introduction of new fashion trends which can stimulate consumer beliefs that products are out of fashion (Niinimäki, 2011). Ultimately, these clothing products perceived as outdated end up in the landfills after a relatively short cycle of use, thereby exacerbating the environmental impact of clothing consumption (Chapman, 2015; Claudio, 2007). From a sustainable consumption standpoint, this is undesirable.

A review of extant studies related to SC research revealed research gaps in the literature. First, an understanding of SC from a product's longevity standpoint was

missing. Some researchers argued that style-oriented consumers wear clothing products for longer periods and thus act in a more sustainable way but these researchers did not investigate consumption cases in which consumers demonstrate the behavior of wearing clothing for longer periods (Lundblad & Davies 2016; Cho et al., 2015). Cooper, Hughes, and Claxton (2015) reported that wearing clothing for longer periods is critical to sustainable consumption. Hence, the exploration of style requires an in-depth investigation of consumption behavior where there is product longevity. To date, few studies have explored SC (Cho et al., 2015), yet none of them have investigated consumption behavior where there is product longevity in an effort to understand SC

Second, prior studies did not characterize the influence of consumers' style adoption and retention behavior. Consumers who prefer SC are not driven by changing whims of fashion (Mikkonen et al., 2014) and tend to purchase clothing that complements their style (Watson & Yan, 2013). However, just because a consumer has a style does not guarantee that he or she exhibits preferences for SC. For instance, if a consumer changes his style frequently depending on the fashion trends introduced in the market, this means he/she does not truly demonstrate SC behavior. Therefore, understanding more about the consumption behavior of style-oriented consumers is required to explore what characterizes the influence of consumers' style adoption and retention behavior.

### **Purpose of Study**

The purpose of this study was to develop an understanding of SC by investigating consumption behavior in which consumers report product longevity with their clothing. Product longevity represents a product's lifespan. Product lifespan is the entire period

from initial acquisition of a product to final disposal as waste (Cooper, 2010). Hence, lifespan denotes the entire duration of use no matter how many times a product changes ownership or undergoes different context and use (Cooper, 2010). The average lifespan of clothing products is 3.3 years (Langley, Durkacz, & Tanase, 2013), though this estimate may vary depending on the type of clothing product. For example, a Dutch study found different lifespan for the following products: 6.2 years for trousers, 6.8 years for t-shirts, 7.1 years for sweaters, and 11.6 years for jackets (Uitdenbogerd, Brouwer, & Groot-Marcu, 1988). Drawing the variation in the estimates of lifespan for different clothing products (e.g. Uitdenbogerd et al. 1988), this study defines ‘long-term wear of clothing’ as utilizing the wardrobe for at least ten years. Consumers who demonstrate the behavior of long-term wear of clothing reflect their style through these products and the resulting style may influence their approach for future consumption behavior. Therefore, exploring such consumers’ style by examining their consumption behavior may enable us to develop a better understanding of SC.

### **Theoretical Framework**

Values serve as drivers in consumption decisions (Rokeach, 1973). Values are defined as universal life goals that play a pivotal role in guiding individuals toward a desirable end state or behavior (Rokeach, 1973). A number of prior studies have provided empirical support for the relationship between values and behavior (Schwartz & Bilsky, 1987; Rokeach, 1973; Thøgersen & Ölander, 2002). Therefore, this study viewed values as determinants of consumption behavior and set out to identify values through the use of means-end chain theory (Gutman, 1982). The theory states that a consumer’s choice for certain attributes is determined by weighing the consequences (benefits or risks) they

may achieve when fulfilling underlying goals (values). Based on this theory, personal values determine how consumers assess the consequences (benefits or risks) associated with product purchases (Gutman, 1982). Consequences are the result of actions (Gutman, 1982). In the context of consumption, actions refer to the purchase, use and disposal of a product (Winakor, 1969). Purchases are made based on specific attributes (intrinsic and extrinsic features of a product). Attributes that are essential in the context of product longevity include: (1) quality (good fit, durable materials, high quality manufacturing, durability in use and laundering); (2) functionality (suitability in use, easy maintenance); and (3) aesthetic (beauty, classic design, color, fit) (Niinimäki, 2014). An interrelated and hierarchical structure among attribute, consequence, and value is formed in a consumer's mind when making consumption decisions (Reynolds & Gutman, 1988). The means-end theory clearly specifies how personal values determine consumption decisions and provides an appropriate framework for this study.

Consumers' decisions are likely driven by several end goals (values) such as self-expression, protecting planet, social justice (Lundblad & Davies, 2016), conformity, achievement, hedonism (Schwartz, 1992). The current study refers specifically to Stern, Dietz, and Kalof's (1993) value theory that posits that actions relevant to consumption may derive from altruistic values, biospheric values, and egoistic values. Lundblad and Davies's (2015) research explored the same three values (altruistic, biospheric, and egoistic) that are dominant when pursuing sustainable consumption. Altruistic values exhibit concerns for the welfare of others; biospheric values manifest in reflecting care for the non-human species (animal or plant) and protection of the planet in general; egoistic values drive individuals for maximizing personal outcomes (Stern et al., 1993).

Identification of values underpinning consumption behavior would enable us to explore how consumers relate values to SC decisions and what are the dominant values that characterize their consumption process.

### **Research Questions**

To develop an understanding of SC, this study investigated consumption behavior in which consumers report product longevity with their clothing. This study was guided by the following research questions.

Q1. For consumers who exhibit a ‘long-term wear of clothing,’ what are the values that characterize their consumption behavior?

Q2. For consumers who exhibit a ‘long-term wear of clothing,’ what are the values that characterize their style?

### **Research Method**

The study followed a qualitative approach to investigate consumption behavior in which consumers report product longevity with their clothing. This study identified participants who exhibit a ‘long-term wear of clothing’ (in this study, ten years). Participants were recruited through a mass email distribution followed by a snowball sampling method. Participants who were recruited by mass email provided contact information for the snowball participants from their professional network. Snowball participants were invited to the participation by using the same email that was sent for the mass email. Participants were interviewed with questions organized around consumption phases (acquisition, use, and disposal) (Winakor, 1969). Consumers’ values driving consumption actions in every phase such as purchase, use and disposal were explored

during the interviews. The researcher analyzed interview data following the guidelines as set out by Gengler and Reynolds (1995), and Reynolds and Gutman (1988).

### **Significance of the Study**

The intention of this study is to enrich the understanding of SC that still remains an under-studied area. The study by Cho et al. (2015) provided insight into SC and concluded that SC might promote sustainable clothing consumption to a considerable extent. However, the study did not investigate the behavior of actual sustainable consumers. Cooper (2010) argued that long-term use of clothing is the most significant behavior in sustainable clothing consumption. Therefore, in the current study, the researcher picked an extreme consumption case, utilizing the wardrobe for at least ten years, in which consumers embody an actual sustainable behavior. Consumption behavior was investigated in cases where consumers reported product longevity. What makes this study significant is that it investigated actual behavior of consumers who adopt product longevity in an effort to understand their style, rather than asking questions about style to those who may only marginally adopt sustainable consumption behavior.

This research also contributes to the literature by highlighting values driving clothing consumption behavior in regards to style. The findings may explore how consumers relate values to SC decisions and what are the dominant values that characterize their consumption process. Besides, the findings of this study will contribute to the theoretical development of SC.

### **Limitations**

This study has a limitation in that a small number of participants were interviewed, so generalization of findings to a large segment of the population is not



possible. However, the findings are significant for the development of theory. Another limitation of this study is concerned with respondents' qualification for the participation in this study. The study intended to investigate consumption behavior of the participants whose wardrobes were utilized for ten years. However, during the data collection, the researcher found many participants reported a small number of clothing items that they used for ten years or more. This implies that many of the participants did not utilize the large portion of their wardrobe for ten years, indicating a potential limitation regarding the participants' qualification of this study.

### **Operational Definition of Terms**

This section provides definitions of the terms used frequently throughout this study.

**Consumption:** Consumption encompasses the acquisition, use, and disposal of products and services (Winakor, 1969). **Acquisition-** obtaining products or services; **use-** wearing of clothing or retaining it in inventory to be used later; **disposal-** exclusion of the products or services from a consumer's possession (Winakor, 1969).

**Sustainable consumption:** Sustainable consumption is defined as using resources to fulfill basic needs with an end goal of preserving surplus resources for future consumption (Jackson & Michaelis, 2003).

**Sustainable consumers:** In this study, the researcher assumed that consumers demonstrating the behavior of wearing clothing products for longer periods (ten years) are sustainable consumers (Cooper, 2005).

**Personal style:** Personal style is a distinctive mode of tailoring (Otnes & Zayer, 2012) or a certain way of dressing (Hebdige, 1979).

**Style consumption (SC):** SC is a type of personal style behavior (Cho et al., 2015), in which the underlying concept lies in consistency in style use as opposed to constant change (Mikkonen et al., 2014). SC refers to the behavior of adopting a personal style that is timeless but at the same time, enables expression of personal taste in regards to clothing (Cho et al., 2015).

**Fashion:** The “very definition of fashion fuels the momentum for change, which creates a demand for ongoing replacement of products with something that is new and fresh” (Hawley, 2006 p. 263).

**Product longevity:** Product longevity represents a product’s lifespan. Product lifespan is the entire period from initial acquisition of a product to final disposal as waste (Cooper, 2010). Hence, lifespan denotes the entire duration of use no matter how many times a product changes ownership or undergoes different context and use. A product’s longevity is determined by several factors such as consumption behavior, socio-cultural influences, and design attributes created during production (Cooper et al., 2015).

**Values:** Consumer’s universal life goals that play a pivotal role in guiding individuals toward a desirable end state or behavior (Rokeach, 1973). **Altruistic values:** Concerns for the welfare of others; **biospheric values:** care for the non-human species (animal or plant) and protection of the planet in general; **egoistic values:** concerns for maximizing personal outcomes (Stern et al., 1993).

**Consequences:** Result of actions (Gutman, 1982). In the context of consumption, actions refer to the purchase, use and disposal of a clothing product (Winakor, 1969).

**Attributes:** Intrinsic and extrinsic features of a clothing product.

## CHAPTER II

### LITERATURE REVIEW

The literature review has been organized into four main sections. As the study examines style consumption (SC) in the context of product longevity, the first section explains the attributes of product longevity in the context of clothing. The second section describes product attachment along with a summary of the existing literature on attributes of product attachment. The third section provides an overview of style consumption (SC) and its implications in sustainable clothing consumption. The final section defines values as drivers of consumption behavior. These four main sections are followed by a section describing the theoretical background and conceptual framework.

#### **Product Longevity**

One of the approaches to sustainable consumption is by reducing the consumption of resources (Jung & Jin, 2016; Lundblad & Davies, 2016). Cooper (2005) stated that increasing the longevity of clothing products plays a vital role in decreasing consumption. In the context of clothing consumption, product longevity is not to be understood as identical to durability. Durability is “a measure of how long a product will continue functioning as intended and withstand ‘wear and tear’ and decay (or more technically, resist stress or force) before it develops a defect that is deemed irreparable”

(Cooper, 2010, p.8). By contrast, product longevity represents a product's lifespan.

Product lifespan is the entire period from initial acquisition of a product to final disposal as waste (Cooper, 2010). Hence, lifespan denotes the entire duration of use no matter how many times a product changes ownership or undergoes different context and use (Cooper, 2010).

A product's longevity is determined by several factors such as consumption behavior, socio-cultural influences, and most importantly design attributes created during production (Cooper et al., 2015). For instance, discarding of a clothing product that is still functional decreases its longevity. Moreover, consumers' capacity for clothing care, maintenance activities (washing, drying, ironing, bleaching), repairing have a direct impact on clothing longevity (Fletcher, 2012; Niinimäki & Armstrong, 2013). In addition, shifts in societal preferences and norms, and changes in fashion trends can make products obsolete before they become worn out and thus, lead consumers to dispose of products prematurely. Although current products may be perceived obsolete when they no longer function as intended (due to defects or change in body size) (Slade, 2009; Cooper, 2010), clothing products are perceived obsolete especially for aesthetic reasons (new products seems more desirable) (Fletcher, 2012). Clothing replacement is often carried out by a tendency to comply with social and group norms rather than a consumer's desire to obtain enhanced functionality or better protection of the body (Fletcher, 2012). Besides the consumption behavior and socio-cultural influences, design attributes of clothing are vital for longevity since these attributes may increase products' capacity to function properly in the long run. Design attributes for clothing longevity include quality, aesthetics, and functionality (Niinimäki, 2014).

## **Quality Attributes**

Quality is an equivocal term that has been defined in several ways across different disciplines (e.g., production and marketing). Quality may have several facets, such as product quality, service quality, life-cycle quality, or others (Ophuis & Trijp, 1995; Felce & Perry, 1995). In the current study, quality is limited to clothing product only.

Quality may be perceived or objective. “Objective quality refers to measurable and verifiable superiority on some predetermined ideal or standard” (Zeithaml, 1988, p. 5). Perceived quality, on the other hand, is “the customer’s perception of the overall quality or superiority of a product with respect to its intended purpose, relative to alternatives” (Aker, 1995, p. 56). Thus, perceived quality is determined by a consumer’s judgment that is produced based on tangible or intangible product characteristics, and is the focus of this study (Ophuis & Trijp, 1995).

A product’s quality characteristics include two types: intrinsic and extrinsic (Olson & Jacoby, 1972). Extrinsic quality is the non-physical part of the product. For example, price is an extrinsic product characteristic. By contrast, intrinsic quality is intimately linked to the product and refers to the attributes that are permanent unless the physical properties of the product are altered (Ophuis & Trijp, 1995). Intrinsic factors are the most accurate and strong indicators of perceived quality (Olson & Jacoby, 1972; Wheatley, Chiu, & Goldman, 1981; Rayman, Burns, & Nelson, 2011).

Attributes that are intrinsic to clothing includes fiber content, fit (Davis, 1985), design, construction details (Davis, 1985; Brown & Rice, 1998), fabric and fabric type (Davis, 1985; Heisey, 1990), seams and seam finishes, and matching of seams (Rogers & Lutz, 1990). The quality of these features can be achieved by the selection of durable

materials (fabric, yarn, and accessories), manufacturers' methods of construction (stitch, seam, buttonhole construction) and choice of finish (wet processing such as bleaching, washing) (Rayman, Burns, & Nelson, 2011; Rogers & Lutz, 1990). Another dimension of quality, performance features, describes how a clothing product functions during use (Fowler & Clodfelter, 2001). Performance features include durability and serviceability in use; that is, how well a clothing product can withstand when it is subjected to laundering, shrinkage, colorfastness, and abrasion. For both physical features and performance features, durability is a key component (Fletcher, 2012). Likewise, Stahel (2010) found that durability is largely specific to the materials and design of a product; nevertheless, it influences a product's capacity for satisfactory performance in the long run. Durable materials facilitate longer lifespan of clothing (during routine laundering) (Niinimäki, 2014). Poor quality in material and workmanship are top of consumers' minds when evaluating poor product performance (Claxton & Ritchie, 1979). Therefore, it can be inferred that consumers associate quality with durable material and high quality in manufacturing (Niinimäki, 2014).

### **Aesthetic Attributes**

According to O'Neal (1998), aesthetics refers to the characteristic quality of a product that are non-instrumental. Individuals may value aesthetics which offer hedonic value in addition to utilitarian value. Hundreds of factors may influence how consumers choose what to wear, but perhaps, in almost all cases, consumer preferences are influenced by a product's aesthetics (Niinimäki, 2013). When people experience aesthetics in clothing, they put more effort to take care of it (Niinimäki, 2011). Thus, aesthetic attraction motivates people toward responsible consumption behavior (Satio,

2007). In response to a common question posed by designers regarding if they should design clothing to be functional or to be aesthetically pleasing, Papanek (1971) noted that aesthetics must be considered to be an inseparable aspect of functionality. Prior studies have consistently suggested that aesthetic attributes largely determine consumers' evaluations of clothing (Morganosky, 1984; Holbrook, 1986; Morganosky & Postlewait, 1989). Emphasizing the significance of aesthetic aspects, Morganosky (1984) indicated that aesthetic criteria influence consumers to pay more for apparel regardless of the utilitarian value.

Although aesthetic consideration is closely linked to a person's passion for beauty (Lamb & Kallal, 1992), it does not necessarily equate to beauty (Welsch, 1996). For clothing products, the different parts such as line, shape, color and shade, texture, and attractive designs contribute to the overall aesthetic performance (Lamb & Kallal, 1992). Niinimäki (2011) stated that in clothing, aesthetic attributes include beauty, color, texture, design, fit and touch. The researcher further emphasized that consumers value aesthetics when it comes to long-term wear of clothing, implying that these attributes are associated with longevity of clothing. For instance, clothing products with classic designs or colors may stay in use for a longer duration since these factors do not incorporate trendy looks or shorter duration of fashion trends (Cho et al., 2015). Stone and Farnan (2018) argued that classic products incorporate simplicity in design that prevents the garment from being outdated more quickly. Trendy looking clothing or those perceived as rapidly outdated styles contribute to shorter lifespans of many clothing products. High-quality clothing that incorporates classic design or features is more likely to contribute to longevity (Niinimäki, 2013). The Chanel suit is an exceptional example of clothing

product with classic design and timeless appeal (Stone & Farnan, 2018). Some other classic products are blue denim jeans, cardigans or turtle neck sweaters.

### **Functional Attributes**

Functionality is often cited by consumers in connection with clothing longevity (Niinimäki, 2014). Consumers expect that a clothing product will last and function for a reasonably long period of time (Wieser, Troeger, & Huebner, 2015). Their expectations are influenced not only by clothing quality and aesthetics but also how well it performs or functions in the use stage (McLaren et al., 2015). For example, if a clothing product is made with the intention of easy maintenance, users will expect less time and effort required to care (i.e., washing, drying, bleaching, ironing) for the product. In fact, easy maintenance is often cited as one of the significant functional requirements (Lamb & Kallal, 1992; Niinimäki, 2011), which has a greater potential to facilitate longevity in clothing (Niinimäki, 2011).

Functionality helps to define or explain the utility of clothing. A clothing product may lose its utility to the wearers when it no longer fits them, or fails to deliver comfort and protection (Lamb & Kallal, 1992; Armstrong, Niinimäki, & Lang, 2016). A clothing product is deemed to no longer fit for two primary reasons: change in the wearers' body size and change in the wearers' taste in regards to clothing (WRAP, 2013). Replacing apparel due to changes in the wearers' taste has gained attention among researchers since consumers or designers have little to do with the change in the wearers' body size. Researchers have consistently reported that discarding of undamaged clothing products is often attributed to the fact that the products do not fit anymore due to changes in taste in regards to clothing (Laitala & Klepp, 2015; WARP, 2013). Consumption across different



product categories is driven by a human desire for forming identity and the transmission of symbolic meaning (Solomon, 2004). This is very true in the case of clothing which is constantly on display (Berger & Heath, 2007). Jhonson, et al. (2002) argued that consumers use clothing as a communication tool to facilitate the meaningful exchange of information about their identity. Consumers' desire for novelty prompts them to form new meanings or identities by purchasing new products (Kaiser, 1997). Moreover, consumers tend to form an individual identity that fits within the bounds of social norms (Solomon, 2004). Changes in social norms influence consumers' perception that products no longer fit in the process of communicating their identity (Kaiser, 1997). As a result, consumers replace clothing items and thus, clothing lifespans become shorter.

Another essential functional attribute in clothing longevity is use-experience. How frequently a clothing product requires care or maintenance in relation to the use-context such as work or casual wear is what determines the use-experience of users and thus, affects the functionality of clothing (McLaren et al., 2015). Regular, frequent or occasional use is also critical to the longevity of clothing when developing its functional aspects (McLaren et al., 2015).

### **Product Attachment**

Product longevity largely concerns augmenting product attachment or the user-product relationship (Baxter, Aurisicchio, & Childs, 2015). Product attachment describes the emotional link between consumers and specific products such as apparel (Schifferstein & Zwartkruis-Pelgrim, 2008; Mugge, 2007). Product attachment might be based on special functional demand as well. For instance, an individual with a special functional need may use a particular clothing product for a longer duration due to the

specific functionality that the product offers. However, from the perspective of product longevity, emotional attachment is likely to outweigh the functional attachment to clothing. The logic is that the feeling of strong attachment to a product influences a consumer to manage the product lifecycle by providing adequate care, repairing it in case of any damage, and preventing its premature disposal (Mugge, Schifferstein, & Schoormans, 2006; Van Hinte, 1997; Niinimäki, 2011). When a product holds personal and special meaning to a consumer over the product's utilitarian value, they develop an attachment to that product (Mugge, 2007). Moreover, time and effort intensive behavior such as configuring, renovating or researching products result in significant development of product attachment (Sahni, Khan, & Barad, 2015).

Attributes of product attachment have been studied in several disciplines; including clothing (e.g., Armstrong et al., 2016; Sahni et al., 2015; Mugge et al., 2006; Page 2014). Several factors influencing product attachment have been identified including: product factors (Armstrong et al., 2016, Sahni et al., 2015), store/brand factors (Sahni et al., 2015), social factors (Sahni et al., 2015; Richins, 1994). Sahni et al. (2015) concluded that product factors and social factors are significant predictors of clothing attachment since these factors strongly influence individuals' satisfaction. Product factors include quality, exceptional features, classic design, simple care and maintenance, consumer involvement in product design (co-design or personalization of product), excellent fit, finish and feel (Sahni et al., 2015; Mugge, 2007). Armstrong et al. (2016) reported that satisfactory product factors such as aesthetic design, high-quality material, and better functionality result in pleasurable use-experience, that, in turn, increase clothing attachment. Similarly, Niinimäki and Armstrong (2013) suggested that functionality,

aesthetic experiences, and emotional satisfaction facilitate pleasurable use-experiences at both the physical and emotional levels. Emotional satisfaction is derived from personal values (expression of self, product is made for me, feel confidence in wearing product) and social factors (Mugge, 2007; Armstrong et al., 2016). Social factors represent social acceptance, group affiliation and social appreciation (Sahni et al., 2015). Clothing attachment is often fostered through the products that evoke various memories (Kleine, 2000). For example, wearing a clothing product acquired as a gift from someone special may remind its wearer of that person. Product may also be the reminder of past events such as a special occasion, youth, vacation, the first piece purchased, and others (Niinimäki & Armstrong, 2013). Buying from renowned brands, outstanding store ambiance, and excellent service offered by the staff such as information about reuse and renewal result in good memory, and thus, positively influence product attachment. (Sahni et al., 2015).

The level of clothing attachment may vary depending on the length of ownership and frequency of use (Niinimäki, 2011; Mugge et al., 2005). The higher the frequency of use for a particular clothing product, the greater the likelihood for developing an attachment. Niinimäki and Armstrong (2013) found that a clothing product is most frequently used in 0-6 years of ownership. After the frequent use period, people will wear a piece of clothing less often over time. Eventually, the product provokes memories of a specific time period and the functional benefits offered by the product become irrelevant. Furthermore, product type may affect the level of attachment (Page, 2014; Niinimäki & Armstrong, 2013). In their studies, both Armstrong et al. (2016) and Niinimäki and Armstrong (2013) found that t-shirts tend to be owned longer and used frequently.

Outerwear has longer periods of ownership but lower use frequency depending on the length of seasons and climatic conditions influencing use, and thereby extending the product lifespan.

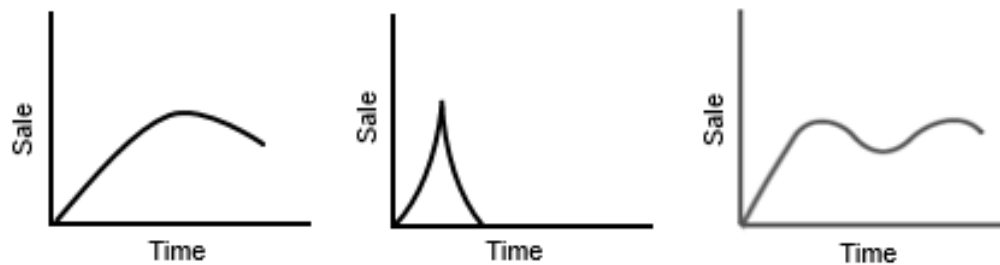
A significant attachment is observed between the users and the products that people use for longer periods (Niinimäki, 2011; Mugge et al., 2005). Similar conclusion could be drawn for consumers demonstrating SC behavior since they use clothing items reflecting their style for longer periods. However, it is not yet clear how and to what degree clothing attachment is formed for style-oriented consumers, and which factors are strongly attributed to clothing attachment in SC behavior.

### **Style Consumption**

Before delving into the discussion of SC, it is essential to distinguish some important terminology. Terms such as style, fashion, and fad are often used in the fashion literature which can cause confusion about the meaning and application of the terms. Similar confusion may occur between the use of the terms style and fashion since many studies use these terms interchangeably (Ostberg, 2012; Marsh, Eckert, & Potter, 2010). Therefore, to avoid unnecessary confusion, it is required to clearly explain these terms.

In the context of clothing, style is a distinctive mode of tailoring (Otnes & Zayer, 2012). Once a style is created, it lasts for generations no matter how many times fashion trends change (Hebdige, 1979). Fashion is a style that groups of people of various sizes accept and use for a period of time (Stone & Farnan, 2018). A style is regarded to be in fashion as long as it is accepted by a group of users. Once the users replace a style with a new one, the style becomes out of fashion. In this sense, fashion is transient while styles are eternal (Murray, 1997; Black, 2008; Mikkonen et al., 2014). Fads describe a shorter period of fashion adoption (Sproles, 1981). Stone and Farnan (2018) described fads as

following the same route as the standard fashion lifecycle but declining very rapidly after the style gains instant popularity. The fashion industry has witnessed several fads such as sagging pants, liquid leggings, trucker hats etc. Quantifying the duration of time that styles will demonstrate phases of the fashion cycle is difficult (Stone & Farnan, 2018), though some studies offer insights into the phenomenon. Sproles (1981) stated that fads last for weeks or a couple of months, fashions typically endure for years (approximately 5-10 years), and styles gaining ongoing acceptance for about a decade or longer are defined as classics. The following diagram illustrates the lifecycle for style, fashion, and fads.



*Figure 2.1. Style, Fashion, Fad – Product Lifecycle Stages (Claessens, 2015).*

A review of prior studies (e.g. Gronow, 1993; Kaiser, 1997; Cho et al., 2015; Mikkonen et al., 2014; Lundblad & Davies, 2016) describing the meaning of style revealed recurring themes: first, style as specific to individual expression only; second, style as specific to both individual and timeless expression. Personal style is a distinctive mode of tailoring based on individual taste (Otnes & Zayer, 2012). In other words, it refers to a certain way of dressing (Hebdige, 1979). As individual taste is susceptible to change (Kaiser, 1997), personal style may or may not result in the timeless expression of style.

Style Consumption (SC) is a type of personal style behavior defined as consistency in style use as opposed to constant change over time (Cho et al., 2015; Mikkonen et al., 2014). Consistency occurs in identifying clothes reflecting a personal style that prevails many fashion cycles regardless of the latest trends. Consumers adopting SC are persuaded to reflect their clothing taste in a relatively stable way without impulsively following the trends (Mikkonen et al., 2014). Therefore, SC refers to the behavior of adopting a personal style that is timeless but at the same time, enables expression of personal taste in regards to clothing (Cho et al., 2015). A style-oriented consumer as Cho et al. (2015) describe, prefers clothing with classic designs. A definition of classic design or classic product was given by Stone and Farnan (2018) who stated that classic design connotes good taste in clothing and thus, remains in social acceptance over longer periods no matter how many times fashion cycles come and go. Stone and Farnan (2018) further highlighted that unlike fashion or fad, a product with classic design exhibits a latter position (see Figure 2.1) on the fashion lifecycle curve. Cho et al. (2015) specified that individuals holding preference for SC are not driven by the changing whims of fashion. Therefore, these authors argue that consumers who demonstrate SC behavior are more likely to acquire and wear clothing products with classic design.

Consumers adopting SC demonstrate fashion consciousness (Cho et al., 2015). Fashion consciousness determines the degree to which a consumer shows interest and awareness in current fashion (Lertwannawit & Mandhachitara, 2012; Shim & Gehrt, 1996). A number of studies view fashion conscious consumers as novelty seekers (e.g., Shim & Gehrt, 1996; Wesley, LeHew, & Woodside, 2006) which could encourage more frequent consumption of clothing. However, Cho et. (2015) argued that fashion-

conscious consumers take higher interest in the latest fashions but their goal is not driven by seeking novelty or pursuing trends, rather they seek style that really communicates their identity and hold onto the style for longer periods. This refers to a contradiction concerning how Cho et al. (2015) define fashion consciousness as opposed to how prior studies (e.g. Shim & Gehrt, 1996; Wesley et al., 2006) describe fashion consciousness.

SC behavior is also predicted by the desire for frugal consumption (Cho et al., 2015). Frugal consumers are highly concerned about a product's price versus the value it offers (Pepper, Jackson, & Uzzell, 2009). This does not mean that frugal consumers demonstrate the behavior of purchasing low-cost products. Rather, they possess higher degrees of interest in buying products that minimize the quantity of clothing owned and thereby increasing the efficiency in consumption (Lastovicka et al., 1999). Frugal consumers are less affected by relational judgments or social pressure (Pepper et al., 2009), which may shift their focus toward a timeless classic style (Cho et al., 2015). Perhaps, this also resolves the aforementioned contradiction concerning the characterization of fashion consciousness in SC. Although consumers adopting SC demonstrate fashion consciousness (interest in current fashion), they show interest in frugal consumption too. Therefore, these consumers have greater tendency to adopt classic styles since classic style remains in fashion over longer periods and thus, facilitates higher efficiency in consumption.

Studies addressing sustainable consumption in relation to SC have been conducted by several researchers (Cho et al., 2015; Watson & Yan, 2013; Lundblad & Davies, 2016). The findings of these studies suggest that SC is closely linked to longevity and therefore, SC has the power to promote sustainable consumption to a greater extent.

For example, Cho et al. (2015) found a significant positive relationship between SC and sustainable consumption behavior such as the purchase of environmentally friendly clothing, responsible care for the prolonged use of clothing, and sustainable disposal of clothing. SC motivates consumers to keep clothing products longer in the consumption cycle. During the long-term use of a clothing product, consumers develop an emotional link to the product (Armstrong et al., 2016). This emotional link persuades consumers to retain the product in the consumption system as long as possible (Mugge et al., 2006; Armstrong et al. 2016). Lundblad and Davies (2016) emphasized that sustainable consumers prefer clothing products with classic design, timeless cuts, durable materials that signify the timelessness aspect of style. In this sense, sustainable consumers are more style-oriented than fashion-oriented. Cooper (2010) argued that long-term use of clothing is the most significant behavior in sustainable clothing consumption. Hence, establishing a more robust understanding of SC requires exploration of consumers' personal style who exhibits long-term use of clothing. To date, few studies have investigated consumers who wear clothing for longer periods to explore their personal style in an effort to expand the understanding of SC.

### **Values as Drivers of Consumption Behavior**

Values are defined as universal life goals that play a pivotal role in guiding individuals toward a desirable end state or behavior (Rokeach, 1973). According to Solomon (2004), value is a belief that some conditions or offerings are preferred to others. For example, people tend to wear clothing that makes them look young, believing that looking younger is preferable to appearing old. Two different individuals may have shared values. However, the underlying belief system may vary between them. For



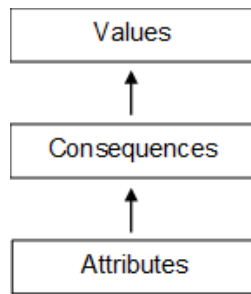
instance, a person may avoid a leather jacket due to animal activism while another person may avoid a leather jacket for its higher price. Studies on psychology describe personal value as a basic psychological construct that can largely influence many consumption-related decisions (Rokeach, 1973; Gutman, 1982). The importance of personal values in clothing consumption decisions has been recognized by many researchers (Hines & O'Neal, 1995; Sproles, 1979; Cho et al., 2015), yet few of them have considered the perspective of consumers' product longevity experiences.

Consumers' decisions are likely driven by several end goals (values) such as self-expression, protecting the planet, social justice (Lundblad & Davies, 2016), group conformity, achievement, and hedonism (Schwartz, 1992). Stern et al.'s (1993) value theory posits that actions relevant to consumption may derive from three main values: altruistic values, biospheric values, and egoistic values. Altruistic values suggest that consumers are concerned about the welfare of others; biospheric values manifest in reflecting care for the non-human species (animal or plant) and protection of the planet in general; egoistic values drive individuals to maximize personal outcomes (Stern et al., 1993). Early research found that sustainable consumption is driven by biospheric values and altruistic values. More recent studies point out that the self-interested facets such as egoistic values also influence sustainable consumption (Lundblad & Davies, 2016; Cho et al., 2015). According to Lundblad and Davies (2016), for some sustainable consumers, egoistic values may be more dominant than biospheric and altruistic values. Perhaps, this is true for the individuals who prefer style over fashion. From the egotistical viewpoint, style-oriented consumers are internally driven unlike fashion-oriented consumers who are externally focused (Mikkonen et al., 2014). Tsai (2005) argued that personal orientation

is central to the consumption motives and values related to personal style since it is independent of relational judgments, social pressure or social trends. There is currently insufficient research that links personal values to SC behavior. Cho et al.'s (2015) research provide an example of a value-based study. However, that study is limited by quantitative methods which does not provide a deeper understanding of how specific aspects of consumer values influence consumption behavior and personal style.

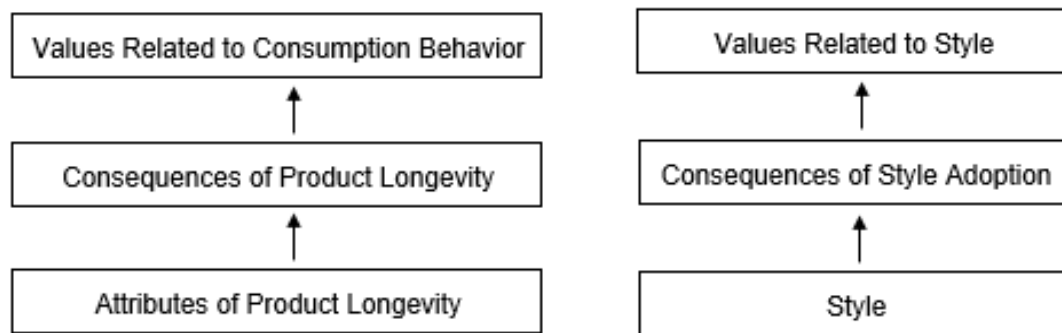
### **Theoretical Background and Conceptual Framework**

The current study followed the means-end chain theory (see Figure 2.2) introduced by Gutman (1982). The theory states that consumers use means such as products and services to attain value. Inherent to the theory is the assumption that consumers' choice for certain attributes is determined by weighing the consequences (benefits or risks) that they may achieve when fulfilling underlying goals (values) (Reynolds & Gutman, 1988). Based on this theory, personal values determine how consumers assess the consequences (benefits or risks) associated with product purchase (Gutman, 1982). Consequences are the result of actions (Gutman, 1982). In the context of consumption, actions refer to the purchase, use, and disposal of a product (Winakor, 1969). Purchases are made based on specific attributes (intrinsic and extrinsic features). An interrelated and hierarchical structure among attribute, consequence, and value is formed in a consumer's mind when making consumption decisions (Reynolds & Gutman, 1988). The theory specifies how values determine consumption decisions. Hence, the means-end theory is appropriate for this study.



*Figure 2.2.* The Means–End Chain. Adapted from Understanding consumer decision making: the means-end approach to marketing and advertising strategy (p. 13), by J. C. Olson and T. J. Reynolds, 2001, London: Psychology Press. Copyright 2001 by Lawrence Erlbaum Associations, Inc. Adapted with permission.

There are two research questions in this study. First, for consumers who exhibit a ‘long-term wear of clothing,’ what are the values that characterize their consumption behavior? Second, for consumers who exhibit a ‘long-term wear of clothing,’ what are the values that characterize their style? To identify those values, the study proposed a conceptual framework that is presented in Figure 2.3.



*Figure 2.3.* Conceptual Framework.

The conceptual framework has two parts. The left column of the framework is directly related to the first research question and the right column of the framework is directly related to the second research question. Each component of the conceptual framework is based on the means-end chain, suggesting there are three basic elements, attributes, consequences, and values. For the left column of the conceptual framework,

attributes represent the lowest level of means. As the study examined consumption behavior in the context of product longevity, the framework employed longevity attributes in the interpretation of product attributes. Several intrinsic and extrinsic product attributes such as durable material, construction details, price, style, brand, texture are critical to product longevity, which had been broadly discussed at the product longevity section of this chapter. The next level of the framework refers to the consequences (benefits or risks). Consumers may associate several benefits such as value for the money spent, feeling of wearing a garment, its appearance, convenience, consuming less, supporting the environment, or other with the attributes of clothing products (Fowler & Clodfelter, 2001; Lundblad & Davies, 2016). Also, the choice of attributes is influenced by the perceived risk associated with the use of a product (Reynolds & Gutman, 1988; Solomon, 2004). For instance, consumers may avoid a certain color or style to avoid unnecessary attention from others. Prior studies reported that a significant attachment is observed between the users and the products they use for longer periods (Niinimäki, 2011; Mugge et al., 2005). Hence, product attachment might also appear as the potential consequence of product longevity attributes. Finally, values were presented at the highest level of the conceptual framework. Several personal values may drive consumers to choose what to wear and why to wear.

For the right column of the conceptual framework, the similar path was followed for identifying values that characterize consumers' style behavior. The lowest level of means is represented by the attribute, style. Literature suggests different types of style that consumers may adopt in their consumption behavior (Stone & Farnan, 2018). For instance, some consumers prefer basic and classic styles that remain up-to-date for longer

periods whereas some consumers prefer latest, the styles that are in trend. Furthermore, some consumers might have a different conception of style based on their self-regulation or personal characteristics, which might emerge from participants' responses. So, whatever the style consumers adopt, there must be certain benefits or risks that consumer will want to achieve or avoid by adopting that style. Therefore, consequences of style adoption were presented at the next level of the conceptual framework. Finally, the highest level of the conceptual framework produced information about values that determine how consumers assess the consequences of style adoption.

As the fundamental of both columns of the conceptual framework was the means-end chain theory, they were presented with the same type of elements at the same level (e.g., attributes to attributes, consequences to consequences, and values to values). This further suggests that the whole conceptual framework simultaneously generated personal values that characterize individuals' consumption behavior as well as their style.

## CHAPTER III

### METHODS

The purpose of this study was to develop an understanding of style consumption (SC) by investigating consumption behavior in which consumers report product longevity with their clothing. To develop an understanding of SC, this study was guided by two research questions. First, for consumers who exhibit ‘a long-term wear of clothing,’ what are the values that characterize their consumption behavior? Second, for consumers who exhibit ‘a long-term wear of clothing,’ what are the values that characterize their style? To attain these objectives, the study followed a conceptual framework (see Figure 2.3). This section provides an overview of the entire research process including the sampling plan, techniques used to recruit participants, and data collection protocols. Finally, this section describes the technique utilized for data analysis, role of the researcher, and the measures taken to confirm the reliability and validity of findings.

#### **Qualitative Research Approach**

A qualitative approach is recommended when a relatively new phenomenon, knowledge or action appears; of which there is a dearth of relevant research, and standardized instruments are unavailable to measure the emerging phenomenon (Patton, 2002). The qualitative approach provides researchers with deeper and comprehensive

information about a case through description, observation, and categorization. Given the scant SC research in the context of product longevity, this study utilized a qualitative approach. Merriam (2002) suggests that a qualitative researcher may approach a phenomenon from an interpretive, critical, or postmodern stance. In this study, a basic interpretive approach was used to understand the phenomenon of style consumption. In the basic interpretive approach, a researcher strives to understand how participants construct the meaning of a particular phenomenon (Merriam, 2002). Thus, interpreting participants' consumption experience was considered vital for understanding the phenomenon, style consumption.

In the basic interpretive approach, observations, interviews, and document analysis are the three common ways to collect the data (Merriam, 2002). Determining which data collection strategy will yield the best and rich information depends on the research problems that a study sets out to resolve (Patton, 2002). The current study investigated consumption cases where participants' wardrobe was utilized for longer periods (in this study, 10 years) in an effort to understand their personal style. Collecting data by observing individuals' consumption behavior for ten years would be nearly impossible. Document analysis would not yield the best information since an individual do not record or preserve their consumption activities in a written, oral, or a visual (e.g., photograph) document format. Besides, primary sources of information (e.g., interview) for collecting data as opposed to secondary sources (e.g., document) always yield rich and precise data regarding the phenomenon being investigated (Qu & Dumay, 2011; Patton, 2002). Interview is a useful source of information for collecting primary data, which helps researchers learn about the real world of others (Qu & Dumay, 2011). As the

current study's objectives were to identify personal values driving consumption behavior and style, an in-depth one-on-one conversation with the participants was needed to uncover their values. Hence, the interview-based approach was suitable for this study.

## **Participants**

### **Qualification of Participants**

The strength of qualitative research lies in the ability to select an appropriate sample (Patton, 2002). This study investigated consumption behavior of those who exhibit long-term wear of clothing. Quantifying the long-term wear of clothing is difficult since literature offers disparate findings. Beton et al. (2014) estimated clothing lifespan to be 1-3 years, but they did not refer to the respondent's reports of wear cycles. Another consumer survey reported that the average lifespan of clothing products is 3.3 years (Langley et al., 2013), though this estimate may vary depending on the type of clothing products measured. For example, a Dutch study found different lifespans for the following products: 6.2 years for trousers, 6.8 years for t-shirts, 11.5 years for blazers, 15.2 years for skirts, 7.1 years for sweaters, and 11.6 years for jackets (Uitdenbogerd et al., 1988). Claxton et al. (2015) reported that clothing lifespan for knit-wear is 3.7 years, shirt is 3.6 years, t-shirt is 3.3 years. The findings in the aforementioned studies indicate variation in the estimates of lifespan for different clothing products. Drawing on this product type variability, the current study defines 'long-term wear of clothing' as utilizing the wardrobe for at least ten years. Besides, it was essential to identify a consumer group that is distinct enough from a general consumer group. Therefore, the participants in this study were those who utilized the wardrobe for at least ten years.



The study sent out the invitation to the sample by specifying that individuals who were utilizing their wardrobe for 10 years or more are the ideal participants for this study. The respondents were supposed to participate in the study based on this requirement. Before beginning the interviews, the researcher asked participants how many clothing items in their wardrobe were used for ten years. Many participants reported a low number of clothing items (see Table 4.1) that had been used for ten years or more, suggesting many of the participants had not utilized the larger portion of their wardrobe for ten years. This certainly indicates a disconnection between what the study expected versus what the study received in terms of participants' qualification. However, participants who reported using fewer wardrobe items for ten years asserted that they indeed use a garment to the point when it develops irreparable defects no matter what the time is, either ten years or not, indicating their positive intention for the 'long-term wear of clothing.' Moreover, eighteen participants' reported that they disposed of clothing when it did not fit the size of the body anymore or when it became unusable due to irreparable defects, suggesting most of the participants rarely disposed of clothing due to the change in clothing taste. Therefore, this study continued with the participation of these respondents. Nevertheless, it refers to a potential limitation of this study.

### **Recruitment of Participants**

The participants were recruited in two ways: mass email (see Appendix A) and a snowball sampling approach. A mass email was sent to 5000 prospective participants including faculty, staff, and students at a large university in the southwestern region of the U.S. The email was sent through Qualtrics. The email described the topic of the study and its purpose. The recipients of this email first provided their consent on Qualtrics

about the participation in this study, and then, finished a short survey (Appendix C) that requested their demographic information. The completion of the survey directed the recipients to a website, Calendly.com, where they scheduled the time, date and location in the university campus. Reynolds and Gutman (1988) recommended at least twenty participants to be included in the soft laddering sample. In this study, eighteen recipients of the mass email finished the survey and signed up for the interviews. Once these eighteen participants signed up for the interview, the researcher started interviewing these participants. At the same time, the researcher kept the recruitment process open for more participation since, at least, two more participants were still needed to comply with Reynolds and Gutman's (1988) recommendation about the least number of participants.

Two additional participants were recruited through snowball sampling. Snowball sampling is a technique for selecting participants through personal networks (Neuman, 2002). During the data collection, two of the eighteen participants who were recruited by mass email provided contact information for three additional prospective participants from their professional network. The researcher then invited those three prospective participants to the study through the same email that was sent for the mass email. Among these recipients, two individuals finished the survey and scheduled the interview on the Calendly.com. Although the participants selected by snowball sampling knew each other as they were recruited by the personal network, none of them are influenced by any other participants in the network (Neuman, 2002). The entire process from the mass email launch to the completion of 20<sup>th</sup> interview consumed twenty-one days. The interview event on Calendly.com was open for five more days in case any participant signed up for the interview. No participant signed up for the interview during this five days' period.

After five days, the researcher closed the interview event on the Calendly.com and started the next phase, data analysis.

### **Data Storage**

The Qualtrics survey asked for participants' names and demographic information. The names were needed to track the demographic information. The researcher created a spreadsheet containing the subjects' names and demographic information. When the interview was finished, the researcher replaced the participant's name with a letter (e.g., A, B, C) in the spreadsheet (see Appendix D). This way the spreadsheet excludes identifiable information. After each interview, the researcher named both the audio recorded file and the transcribed file after the same letter that was given to the participant in the spreadsheet mentioned above. This way, the researcher correlated the demographic information of participants with their respective audio recorded file and transcribed file. Moreover, this approach omitted the need for using participants' identifiable information (name) in the audio recording and transcribed file. The spreadsheet was stored on the researcher's password protected cell phone, and the audio recordings and transcribed files were stored on the researcher's password protected laptop.

### **Financial Incentive**

There was a financial incentive associated with the participation in this study. A participant was selected for a \$50 cash incentive through a random drawing that was held on June 2018. The drawing and the awarding of the incentive were undertaken by following the Institutional Review Board's (IRB) protocol. A university official (Accounting Specialist) conducted the drawing to identify a participant from the 20 participants. The researcher contacted the winner via the email that was provided by the

participant in the Qualtrics survey. The researcher physically handed over the \$50 cash incentive to the winner in the presence of a university official. The researcher, the winning participant, and the official signed a documentation receipt (see Appendix F) evidencing that the cash incentive was transferred to the winning participant.

## **Data Collection**

### **Laddering Technique**

The data collection followed laddering technique. “Laddering refers to an in-depth, one-on-one interviewing technique used to develop an understanding of how consumers translate the attributes of products into meaningful associations with respect to self, following means-end theory” (Reynolds & Gutman, 1988, p. 12). Laddering is a useful method in qualitative research for investigating behavior (Veludo-de-Oliveira, Ikeda, & Campomar, 2006). It is also appropriate when a study utilizes means-end chain theory (Reynolds & Gutman, 1988). As the current study investigated behavior through the means-end chain, laddering was appropriate for this study. In laddering, the interview format constitutes a sequential investigation, starting with “What (product attributes) are preferred by you?” followed by “Why are these (attributes) important to you?” questions. Attributes are the intrinsic and extrinsic features of a product. Some intrinsic features of clothing products are the component material, color, design, shape, while extrinsic features include brand, price, and manufacturing location.

Laddering has two types: hard laddering and soft laddering. Hard laddering is a technique where a very specific predesigned interview questions are needed for the data collection that has a more objectivist epistemology (Reynolds & Gutman, 1988). In hard laddering, participants are pushed to create ladders one by one. Moreover, hard laddering

is recommended when the decision process for a particular phenomenon is already established and reasonably well understood (Lundblad & Davies, 2016). Soft laddering refers to the data collection method that allows participants adequate breadth of expression just like the interpretive interviews do (Veludo-de-Oliveira et al. 2006). In soft laddering, participants are not necessarily pushed to create ladders. Reynolds and Gutman (1988) suggested soft laddering for the exploratory study. Moreover, Veludo-de-Oliveira et al. (2006) emphasized using soft-laddering since it offers greater chance to conduct an appropriate interview depending on participants' level of knowledge. The current study is exploratory in nature and the decision process for SC is not well established in the literature, which makes the soft laddering a viable method for this study.

### **Interview Guide**

Although soft laddering does not necessarily require a concrete interview guide, the study utilized an interview guide to better structure the data collection process. Participants were interviewed with questions organized around consumption phases so that consumers' values driving consumption actions in each phase could be explored. Consumption includes three phases: acquisition, use, and disposal (Winakor, 1969). Acquisition is obtaining products; use refers to wearing of clothing or retaining it in inventory to be used later; and disposal is the exclusion of products from a consumer's possession (Winakor, 1969). Table 3.1 contains the interview guide.

Table 3.1

#### *Interview Questions*

- 
- Q1. For consumers who exhibit a 'long-term wear of clothing,' what are the values that characterize their consumption behavior?
- Q2. For consumers who exhibit a 'long-term wear of clothing,' what are the values that characterize their style?
-

Concepts	Interview Questions
Attributes	<ol style="list-style-type: none"> <li>1. What attributes such as quality, aesthetic or functionality do you look for when you shop for clothing? <ul style="list-style-type: none"> <li>○ Which quality attributes such as material, fabrication, price, brand do you prefer and why?</li> <li>○ Which aesthetic attributes such as design, color, fit do you prefer and why?</li> <li>○ Which functional attributes such as easy maintenance, comfort, durability in use do you prefer and why?</li> </ul> </li> <li>2. What are the attributes you take into account when you intend to wear clothing items for longer periods? <ul style="list-style-type: none"> <li>○ Probing questions typified by why?</li> </ul> </li> <li>3. Is there a particular style you look for when shopping for clothing? By style I mean a specific mode of tailoring or a certain way of dressing? Can you describe your style? <ul style="list-style-type: none"> <li>○ Probing questions typified by why?</li> </ul> </li> </ol>
Consequences	<ol style="list-style-type: none"> <li>4. Do you feel any attachment or emotional link with any of your clothing items that you have been using for 10 years? <ul style="list-style-type: none"> <li>○ Why do you feel attached? (Interviewees may indicate classic style, feeling good and confident, memory associated with the product, customized product, refashioning, social acceptance and others?)</li> <li>○ Why does classic style, feeling good, memory..... matter to you?</li> <li>○ How do you typically feel when you get dressed with the clothing items that you have been using for 10 years or more?</li> </ul> </li> <li>5. Think about the oldest items you have? What are the reasons you have kept it for so long? Is it for functional benefits, aesthetic reasons or for any other reasons? <ul style="list-style-type: none"> <li>○ Why do functional benefits, aesthetic reasons or other reasons (reasons mentioned in the previous questions) important to you?</li> </ul> </li> <li>6. What steps do you take to handle the maintenance such as laundering, ironing, repairing of your clothing? How do you make clothing last?</li> <li>7. How frequently do you dispose of clothing? How do you dispose of (donating, reusing, or discarding) your clothing, typically? <ul style="list-style-type: none"> <li>○ Why do you donate or reuse or discard?</li> </ul> </li> <li>8. Why do you typically dispose of your clothing? (Is it for clothing defect, change in body size, change in your clothing taste, or social trend?) <ul style="list-style-type: none"> <li>○ Probing questions typified by why?</li> </ul> </li> </ol>

Values	<p>9. Are you interested in fashion trends in general? What do you think about fashion trends being continuously changed every season? How does that affect your styling?</p> <p>10. What is preferred to you? Keeping your wardrobe/closet up-to-date with changing fashion trends or holding onto a classic style?</p> <ul style="list-style-type: none"> <li>○ Probing questions typified by why?</li> </ul> <p>11. Do you think your style somehow helps you express yourself?" (Why or why not?) Tell me more about it.</p> <p>12. Have you ever received compliments or criticisms from others regarding your style? What kind of clothing did you wear at that time? Can you please share how you felt at that moment?</p> <p>13. Can you please share if that complement/criticism affected your style later in some way? If so, how and why?</p>
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### **Pilot Interviews and Lessons Learned**

Before beginning the data collection, the researcher piloted the interview protocol with several individuals. Through the insights obtained from this pilot process, the researcher modified the interview guide by adding some new probing questions and refining the old ones. The pilot process also helped the researcher to learn how to stay on course during the data collection. Explaining the typical laddering technique to the research participants was a significant learning point in the pilot process. At the beginning of the interview, the researcher interpreted the typical laddering technique to the participants in layman's terms. More precisely, the researcher told the participants that they would be asked to provide reasons for the answers they would give. For instance, the researcher told the participants, "If you (participants) tell me (researcher) that you prefer a brand, I will ask you why?" As mentioned earlier, participants were asked to choose a date, time, and a location in the campus for the interviews on Calendly.com. Once a participant provided that information on the Calendly.com, it automatically created an event and sent a notification to the researcher via email. So, no

further communication was necessary for scheduling the interview. However, some participant reported their willingness for any location in the campus and provided their phone number to contact them regarding interview's location. In these cases, the researcher selected the location and notified the participants via text messages. All interviews were taken place in the university campus that includes participants' office, reserved rooms in the library and other buildings. The researcher brought the audio recorder (mobile) to the interview. Once the data collection began, the researcher observed emerging insights that required refinement of the questions and thus, guiding the remainder of the interviews in specific directions relating to the research objectives. During the interviews, the researcher initiated some probes based on pre-established attributes such as brand preference, style to identify personal values derived from those attributes.

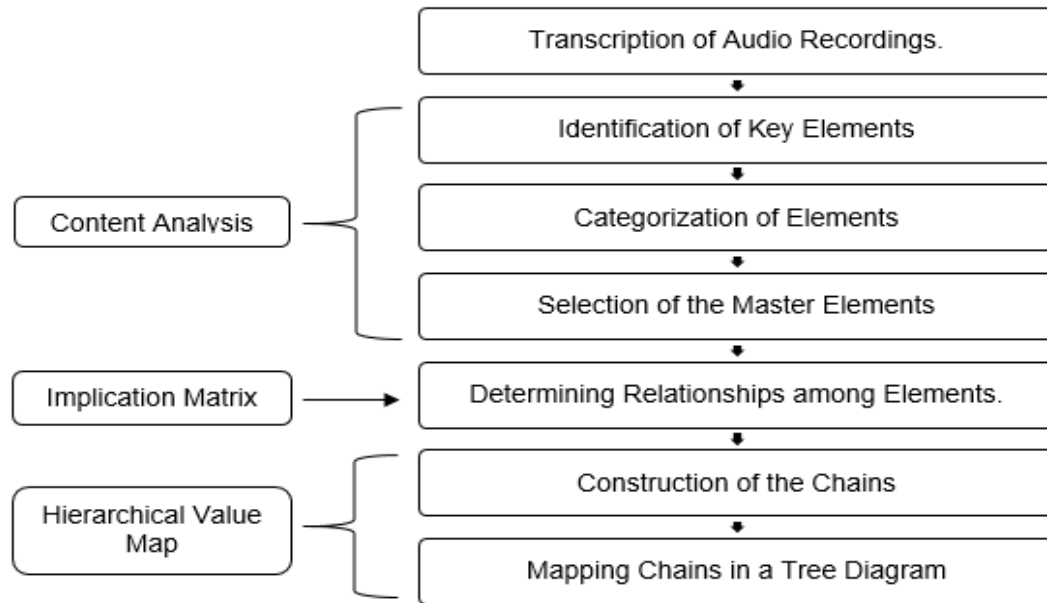
### **Data Analysis**

During the interview, the researcher used a transcription software, Google.doc that automatically converted the conversations between the researcher and participants to a text file. After each interview, the researcher verified the entire audio recording and cross-checked if there were any missing parts of the conversation that were not transcribed by the software. The researcher manually transcribed any missing parts. The Google.doc software transcribed approximately 60 - 70% of the conversation. The researcher manually transcribed the remaining portions of the conversation.

These transcribed files were analyzed in three main phases: content analysis, implication matrix, and hierarchical value map (HVM) (Reynolds & Gutman, 1988). The implication matrix displays the frequency of relationships among attributes,



consequences, and values in the form of numbers (Reynolds & Gutman, 1988). The HVM is the visual illustration of the implication matrix in the form of a tree diagram (Reynolds & Gutman, 1988). Figure 3.1 outlines the sequential steps of the data analysis.



*Figure 3.1.* Flow-chart of the Phases of Data Analysis.

### **Content Analysis**

The objective of the content analysis was to identify the key elements of means-end-chain theory. The key elements refer to attributes, consequences, and values. The researcher started with the first transcribed file and recorded all the elements on a spreadsheet. The spreadsheet was composed of three columns: attributes, consequences, and values. Each element mentioned by the participants was placed into the respective columns on the spreadsheet. For instance, consider the following conversation with participant A.

**Researcher:** What attributes such as quality, aesthetic or functionality do you look for when you are shopping for clothing?

**Participant A:** Quality probably be number one.

**Researcher:** Why is the quality first attribute that you go for?

**Participant A:** Because I think it will last longer.

**Researcher:** Why does a clothing product have to last long for you? How does that matter to you?

**Participant A:** Because it saves money.

**Researcher:** Which quality attributes are important to you and why?

**Participant A:** I think fabric content like the durable material is more important.

**Researcher:** What is the benefit of durable material?

**Participant A:** I think that it will last longer and look good.

**Researcher:** So, you want a clothing product that lasts long but you also said that it has to look good on you. So, why is looking good important to you?

**Participant A:** I think, how you project yourself is very important.

From this conversation, several elements were extracted (see Table 3.2)

Table 3.2

*Some Elements Recorded for Participant A*

Attributes	Consequences	Values
Fabric content	Last long Value for money Look good	Projecting self

Thus, the researcher inspected the entire transcribed file and recorded all the elements on the spreadsheet. Table 3.3 shows all the elements elicited by participant A.

Table 3.3

*Elements Recorded for Participant A*

Attributes	Consequences	Values
Fit	Feeling to body	Projecting self
Not too tight	Soft and smooth	Convey Personality
Not too loose	Do not like rash	Want to be consistent
Color	Ease of movement	Concerned about clothing
Fabric content	Look good	Modesty
Lining material	Look presentable	Environmental sustainability concern
Not too thin fabric	Look by body shape	Consume less
Durable material	Feel confident	Want respect from others
Natural material	Feel at ease	Hedonism
Simple design	Last long	
Simple style	Value for money	
Conservative style	Easy to care	
Price	Saves time	
	Pay attention to work	
	Perform task	
	Shop less	
	Remind me of the past	

The next step was to create categories of elements across the three key elements: attributes, consequences, and values. The categories were needed to aggregate the findings among participants within three key elements. For example, fit, not too tight, not too loose fall into the category named ‘fit.’ If each element was considered distinct, their mutual relationships and relationships with other elements would not have high frequencies. Where applicable, the researcher defined categories that aligned with the concepts in the existing literature. Of all the intrinsic attributes of clothing product, component material such as fiber type and fabric, construction details such as thread and seam finishes, fit, color, style, durability in use were frequently cited in the literature (Davis, 1985; Apeageyi, McLoughlin, & Omidvar, 2013; Rogers & Lutz, 1990; Niinimäki, 2014). Extrinsic product attributes mostly include price, brand, manufacturing location, environmentally friendly production (Fowler & Clodfelter, 2001; Niinimäki,

2014). Prior studies further suggest several consequences of product purchase including value for money, feeling of wearing, appearance, convenience, supporting environment, consuming less, avoiding attraction (Fowler & Clodfelter, 2001; Lundblad & Davies, 2016). Results of these studies informed categories of the elements established in the current study. Table 3.4 shows the categories for attribute, consequence, and value elements for participant A

Table 3.4

*Categories of Elements for Participant A*

Elements mentioned as attributes	Category	Elements mentioned as consequences	Category	Elements mentioned as values	Category
Fit to body	Fit	Feeling to body	Feel comfortable	Projecting self	Self-expression
Not too tight		Soft and smooth		Convey Personality	
Not too loose		Do not like rash		Want to be consistent	Self-respect
Color	Color	Ease of movement		Concerned about clothing	
Fabric content	Material	Look good	Look good	Modesty	Protect planet
Lining material		Look presentable		Environmental sustainability concern	
Not too thin fabric		Look by body shape		Consume less	
Durable material		Feel confidence	Feel confidence	Want respect from others	Hedonism
Natural material		Feel at ease		Hedonism	
Simple design	Basic/ Simple Style	Last long	Last long		
Simple style		Value for money	Value for money		
Conservative style		Easy to care	Convenience		
Price		Price			

		Pay attention to work	Perform better		
		Perform task			
		Shop less	Less consumption		
		Feel emotional	Feel sentimental		
		Remind me of the past			

Table 3.5 represents the summarized version of Table 3.4 where all the categories for participant A have been listed

Table 3.5

*Final Categories of Elements for Participant A*

Attributes	Consequences	Values
Fit	Feel comfortable	Self-expression
Color	Look good	Self-respect
Material	Feel confidence	Protect planet
Basic/Simple Style	Last long	Social-recognition
Price	Value for money	Hedonism
	Convenience	
	Perform better	
	Less consumption	
	Feel sentimental	
	Choose appropriate outfit	

Moving forward, the researcher inspected the second transcribed file to identify the elements and continued to build on the same spreadsheet. If an element mentioned by the participant fell into a previously identified category, there was no reason to further include the category in the spreadsheet since it had been already listed in the spreadsheet. However, the researcher tallied the number of participants mentioning each category in a separate column of the spreadsheet. Additionally, any time a new category of elements

was elicited from a participant's answers, it was included in the spreadsheet. Continuing with this strategy, the researcher inspected all the transcribed files, explored all the categories, and listed them in the same spreadsheet. In total, nine different categories of attribute, fifteen different categories of consequence, and eight different categories of values were identified.

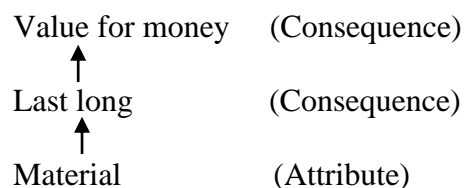
The next phases of the data analysis involved the construction of the implication matrix and HVM. To do so, it was essential to determine the master list of the categories of elements. Gengler and Reynolds (1995) suggested that the HVM is mapped by considering only the linkages that are mentioned by a certain number of participants, and some categories of elements might be discarded from the master list if these categories are mentioned by the number of participants that is lower than that specified number. The assessment of this minimum number of participant depends on the cutoff level (Reynolds & Gutman, 1988). The cutoff level is arbitrary but typically ranges from 3 to 5 for a given sample of 50 to 60 individuals (Reynolds & Gutman, 1988). Setting a cutoff lower than 3 is not suggested by the literature, whereas setting a cutoff above 3 omits many cells from the matrix, thereby limiting the analysis to a few relations (Leão & Mello, 2007; Reynolds & Gutman, 1988). Given the recommendation in the literature and the number of participants (e.g., 20) in this study, a decision was made to set the cutoff level to 3. Among all the categories, seven attribute categories, twelve consequence categories, and six value categories were kept in the master list of categories (see Table 4.5) since these were cited by more than two participants. Once the master list was formed, each category was assigned a separate number. The numbers were arranged in an ascending manner, starting from categories of attributes to categories of values. These numbers

were used in the first row and first column of the frequency matrix to label the master categories. For instance, number ‘2’ in both first row and the first column of the frequency matrix indicates the category, ‘material.’ Similarly, number 11 indicates the category, ‘look good.’

### **Construction of the Implication Matrix**

The second phase of data analysis was the construction of a matrix. The matrix was formed by putting all the master categories of elements into the individual rows and columns of a spreadsheet. For the remainder of the study, categories of elements will be referred to as elements only. The size of the matrix depends on the number of master elements. For example, there are 25 master elements (see Table 4.5), suggesting there would be 25 rows and 25 columns in the matrix. The matrix shows which element in a certain row precede another element in the same row (Reynolds & Gutman, 1988). Take the previous conversation (see the conversation in the ‘content analysis’ section) with participant A as an example.

From that conversation, the following ladder can be constructed.



From the above ladder, it is evident that ‘material’ is directly related to ‘last long,’ so as ‘last long’ with ‘value for money.’ Direct relation denotes the implicative relation among adjacent elements whereas indirect relation refers to the linkage between two elements with a third element in between. The relation between ‘material’ and ‘value for money’ is an indirect relation. Examining both direct and indirect relations were needed to draw the

HVM. For example, there are other ways by which ‘material’ may lead to ‘value for money.’ The relationship between two elements was presented in the form of a fractional number. The left of the decimal point refers to the direct relation while the right of the decimal point indicates the indirect relation. By examining both direct and indirect relations for the above ladder, the following matrix (see Figure 3.2) was formed.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1																									
2								1.00		0.01															
3																									
4																									
5																									
6																									
7																									
8										1.00															
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
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19																									
20																									
21																									
22																									
23																									
24																									
25																									

*Figure 3.2.* Construction of Implication Matrix, Part 1. The number 1-25 represent the master elements.

Moving forward, the researcher inspected the transcribed file for each participant and identified how many times one element preceded another element, both directly and indirectly. For example, each time a participant mentioned a direct relation between ‘material’ and ‘last long,’ the left to the decimal of the number at the intersection of row 2 and column 8 were increased by one. Similarly, the right to the decimal of the number was increased by one if a participant indicated an indirect relation between ‘material’ and



‘last long.’ Figure 3.3 displays the frequency matrix labeling the number of times all elements in the rows lead to all elements in the columns.

	4	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1				12.00															
2		4.00		0.01		3.00	0.01	0.02	3.00		7.00	0.04			0.02		0.06	0.01	
3	3.00	1.01		0.02							0.01	1.01		0.01					
4					7.00	3.00	0.03	0.03				1.00		0.01	0.02			0.03	
5					4.00		3.02						1.00	0.01	0.01	0.01			0.02
6			5.00	0.01	5.02					3.00	0.01	0.01		2.05		0.05	0.01		
7							1.00	1.01		5.00			3.00			0.01			0.03
8				2.00					0.02			3.00					0.03		
9				1.00								2.00		3.00			0.01		
10																			
11							5.03	0.04						2.02	4.02	3.02			
12				0.01			1.02	2.03							0.01			0.01	
13							3.00			0.01				1.00	3.01	0.01			1.00
14																		4.00	
15																	3.00		
16					0.01						0.01			0.01		3.00			
17																		0.01	
18				2.02					0.02		1.00			2.00	0.01		3.00		
19																			3.00
20																			
21																			
22																			
23																			
24																			
25																			

*Figure 3.3.* Construction of Implication Matrix, Part 2. The number 1-25 represent the master elements. There are no relations between attributes 1 and 2-3; 1 and 5-8.

### Construction of the Hierarchical Value Map

The third and final phase refers to the formation of hierarchical value map (HVM). The frequency matrix (see Figure 3.3) is the fundamental of HVM. In constructing HVM from the frequency matrix, the researcher started from the first row of the matrix and looked for the significant relationship in row 1. The significant relationship is represented by the number that is at or above the cutoff level. Using the cutoff of 3, the first significant relationship (the number that is at or above the cutoff level) along the first row was observed to be 12.00 at the intersection of row 1 (price) and column 10 (value for money). Thus a chain 1 – 10 (see Figure 3.4) was formed. The next step was to go to the row 10 and look for the significant relationship (number that is at or above the cutoff level). Looking at row 10, there was no significant relation (no number

that is at or above the cutoff level), suggesting the chain had reached the end. Once the end of a chain was achieved, the process was to head back to the beginning and look for other significant relations (number that is at or above the cutoff level) in the same row of the matrix. Going back to row 1, no number that is at or above the cutoff level was observed, implying the chain 1 – 10 is the final chain. Figure 3.4 and Figure 3.5 offers visual illustration of how the first chain was formed.

	4	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1				12.00															
2		4.00		0.01		3.00	0.01	0.02	3.00		7.00	0.04			0.02		0.06	0.01	
3	3.00	1.01		0.02							0.01	1.01		0.01					
4					7.00	3.00	0.03	0.03				1.00		0.01	0.02			0.03	
5					4.00		3.02						1.00	0.01	0.01	0.01			0.02
6			5.00	0.01	5.02					3.00	0.01	0.01		2.05		0.05	0.01		
7							1.00	1.01		5.00			3.00			0.01			0.03
8				2.00					0.02			3.00					0.03		
9				1.00								2.00		3.00			0.01		
10																			
11							5.03	0.04						2.02	4.02	3.02			
12				0.01			1.02	2.03							0.01			0.01	
13								3.00		0.01				1.00	3.01	0.01			1.00
14																		4.00	
15																	3.00		
16					0.01						0.01			0.01		3.00			
17																		0.01	
18				2.02					0.02		1.00			2.00	0.01		3.00		
19																			3.00
20																			
21																			
22																			
23																			
24																			
25																			

Figure 3.4. Visual Illustration of Forming First Chain for Constructing HVM

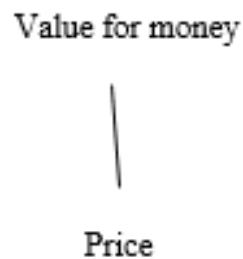
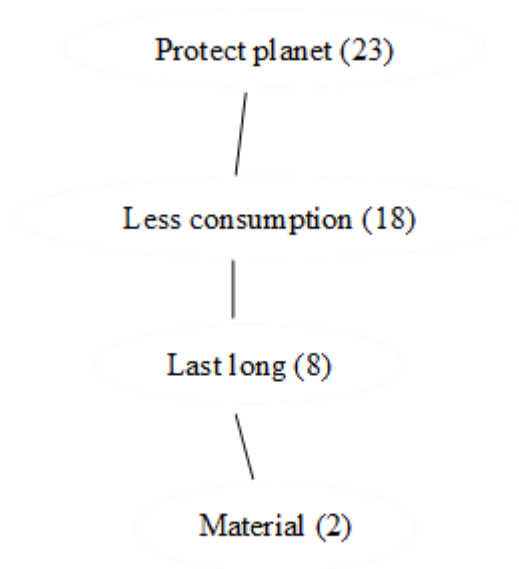


Figure 3.5. First Chain.

The following step was to move to row 2. The first significant relationship along the second row was observed to be 4.00 at the intersection of row 2 (material) and column 8 (last long), implying a chain 2 – 8. The next step was to go to the row 8 and look for the number that is at or above the cutoff level. Looking at row 8, the first significant relationship (the number that is at or above the cutoff level) was found at the intersection of row 8 (last long) and column 18 (less consumption). Thus the chain had extended from 2 – 8 to 2 – 8 – 18. Next, the researcher moved to row 18. The first significant relation was found at the intersection of row 18 (less consumption) and column 23 (protect planet), suggesting the chain had extended to 2 – 8 – 18 – 23. Going ahead to row 23, no significant relationship was found, which implied the end of the chain. See Figure 3.6 and Figure 3.7 for visual illustration.

	4	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1				12.00															
2		4.00		0.01		3.00	0.01	0.02	3.00		7.00	0.04			0.02		0.06	0.01	
3	3.00	1.01		0.02							0.01	1.01		0.01					
4					7.00	3.00	0.03	0.03				1.00		0.01	0.02			0.03	
5					4.00		3.02						1.00	0.01	0.01	0.01			0.02
6			5.00	0.01	5.02					3.00	0.01	0.01		2.05		0.05	0.01		
7							1.00	1.01		5.00			3.00			0.01			0.03
8				2.00					0.02			3.00					0.03		
9				1.00								2.00		3.00			0.01		
10																			
11							5.03	0.04						2.02	4.02	3.02			
12				0.01			1.02	2.03							0.01			0.01	
13								3.00		0.01				1.00	3.01	0.01			1.00
14																		4.00	
15																	3.00		
16					0.01						0.01			0.01		3.00			
17																		0.01	
18															2.00	0.01		3.00	
19																			3.00
20																			
21																			
22																			
23																			
24																			
25																			

Figure 3.6. Visual Illustration of Forming Second Chain for Constructing HVM



*Figure 3.7. Second Chain.*

Once the end of the chain was achieved, the researcher moved back to the row 2 to see if there were other significant relations in the same row of the matrix. Going back to row 2, a second significant relationship was observed at the intersection of row 2 (material) and column 12 (feel comfortable) yielding a chain 2 – 12. Moving forward to row 12, no significant direct relation was found, implying the end of chain 2 - 12. When the second row was inspected, the researcher found another significant relation between row 2 (material) and column 15 (support environment) and draw a chain 2 – 15. Moving to row 15, the researcher found a significant direct relation at the intersection of row 15 (support environment) and column 23 (protect planet) and extended the chain to 2 – 15 – 23. Moving to row 23, no other significant direct relations were observed, suggesting the end of the chain with 2 – 15 – 23. See Figure 3.8 and Figure 3.9 for visual illustration.

	4	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1				12.00															
2		4.00		0.01		3.00	0.01	0.02	3.00		7.00	0.04			0.02		0.06	0.01	
3	3.00	1.01		0.02							0.01	1.01		0.01					
4					7.00	3.00	0.03	0.03				1.00		0.01	0.02			0.03	
5					4.00		3.02						1.00	0.01	0.01	0.01			0.02
6			5.00	0.01	5.02					3.00	0.01	0.01		2.05		0.05	0.01		
7							1.00	1.01		5.00			3.00			0.01			0.03
8				2.00					0.02			3.00					0.03		
9				1.00								2.00		3.00			0.01		
10																			
11							5.03	0.04						2.02	4.02	3.02			
12				0.01			1.02	2.03							0.01			0.01	
13							3.00		0.01					1.00	3.01	0.01			1.00
14																		4.00	
15																	3.00		
16					0.01						0.01			0.01		3.00			
17																		0.01	
18				2.02					0.02		1.00			2.00	0.01		3.00		
19																			3.00
20																			
21																			
22																			
23																			
24																			
25																			

Figure 3.8. Visual Illustration of Forming Third Chain for Constructing HVM.

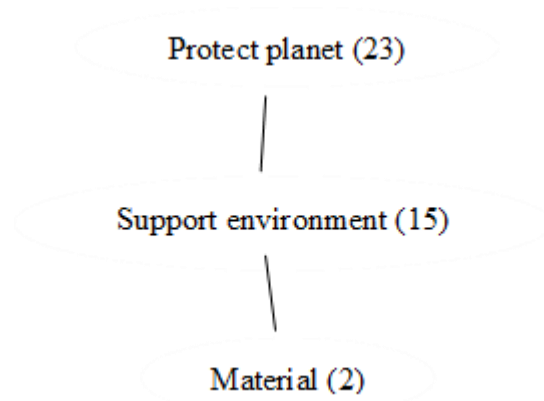


Figure 3.9. Third Chain.

Continuing with this strategy, the researcher inspected all the rows to identify all the chains. The chains were then used to draw a tree diagram on an electronic drawing software named LibreOffice. First, the chain, price (1) – value for money (10) that was derived from the first attribute (price), was drawn and placed at one side of the tree diagram. After that, the chains derived from the second attribute, ‘material,’ were drawn

and placed adjacent to the first chain. Four chains were derived from ‘material.’ Of these four chains, the chain, material (2) – last (8) – less consumption (18) – protect planet (23), was placed adjacent to the chain that was derived from ‘price’ since both the chains were linked by an element, ‘less consumption.’ This way, two chains that were derived from two different attributes were adjacently placed when an element interconnected them. Similarly, ‘feel comfortable’ interconnected the chains (see Figure 4.2) that were derived from ‘material’ and ‘fit,’ or ‘material’ and ‘brand.’ Having explored all the chains and drawn their interconnections with each other, the researcher mapped all the chains one after another and thus, completed the entire tree diagram.

### **Prior Studies Utilizing Laddering Method**

Many prior studies have applied this laddering method to explore the underlying values associated with consumer decisions making. Dibley and Baker (2001) utilized this method to explore the personal values driving consumers’ brand choice. Leão and Mello (2007) utilized this method to understand the customer values of an online newspaper. Examples of clothing consumption research utilizing laddering method are also noticeable in the literature. Hines and O’Neal’s (1995) study identified the underlying determinants of clothing quality by using the laddering method. Lundblad and Davis (2016) investigated consumers’ purchase preferences by utilizing the laddering technique and explored personal values underpinning individuals’ sustainable consumption behavior. The laddering method was also used to explore a wide range of personal values relevant to fair trade or ethical apparel consumption (Jägel et al., 2012), green consumption (Lin & Lin, 2015), as well as luxury fashion consumption (Amatulli & Guid, 2011). Findings of these studies were summarized in Table 3.6

Table 3.6

*Literature on Clothing Consumption Values Utilizing Laddering Method*

Study	Focus of the Study	Findings
Hines and O'Neal (1995)	Identify the underlying determinants of clothing quality.	Three personal values such as self-respect, capable of presenting self, and social recognition determine consumers' choice of clothing quality.
Lundblad and Davis (2016)	Explore the values and motivations behind sustainable fashion purchase decisions.	Six personal values including self-expression, self-respect, responsibility, protect planet, sense of accomplishment, and social justice motivate consumers in sustainable fashion purchase.
Jägel et al. (2012)	Explore consumers' desired consumption outcomes and personal values that drive ethical product preferences.	Personal values including self-respect, recognition, save resources, protect environment, equality, and social justice drive consumers to purchase ethical clothing.
Lin and Lin (2015)	Identify the values and benefits behind the purchase of green products in their effort to adopt green lifestyles.	Consumers' preference for green consumption is driven by several values such as fun and enjoyment, security, sense of accomplishment, self-realization, and sense of belonging.
Amatulli and Guido (2011)	Identify the determinants of purchase intention for fashion luxury goods.	Self-confidence, self-fulfillment, gratification, self-expression, relationship, and well-being are the values identified when buying and consuming luxury goods.

All these studies mentioned above conducted the three-phase analysis of laddering data. Three phases are - (1) identification of the key elements by standard content-analysis techniques while maintaining the levels of abstraction, attribute-consequence-value; (2) construction of a summary table representing the number of linkages between the elements; and (3) graphical presentation of dominant linkages across the levels of abstraction, attributes-consequences-values. Insights gained from these studies facilitated the process of laddering data analysis for the current study.

## **Role of the Researcher**

A fundamental necessity of qualitative research is to clarify how well a researcher fits the type of research being undertaken (Patton, 2005). The researchers' expertise and level of knowledge may limit their capacity to properly represent the participants' responses. Hence, a researcher's role as the conductor of research needs to be interpreted.

The researcher is a textile background professional. After commencing undergraduate study on textile engineering and management, the researcher spent nearly one and half-years in the textile industry specialized in the manufacturing of apparel and textiles. Being passionate to learn about the other side of textile business, textile consumption, the researcher started graduate studies in merchandising with a research focus on clothing consumption and sustainability. Although the researcher possesses a fair knowledge of the manufacturing aspect of apparel and textiles, the researcher's knowledge of clothing consumption and personal style was limited at the beginning. The researcher's developed his knowledge and skills by studying relevant courses and taking part in research projects. Besides, teaching the lab section of an undergraduate textile class amplified the researcher's knowledge of textiles. All these can be regarded as the preparatory tasks undertaken by the researcher to commence the current research study.

During the time spent in the apparel industry and in the graduate program, the researcher experienced the barriers imposed by the current fashion system on sustainable clothing consumption. The researcher realized that the current fashion system encourages frequent replacement and overconsumption of clothing, thereby preventing the individuals from consuming sustainably. Responsive to the researcher's realization about current fashion system, the researcher engaged himself in style consumption, and came to



a conclusion that with a conscious choice of style, it is possible to shift consumers' focus toward sustainable clothing consumption without sacrificing their desire for expressing personal clothing taste. The researcher wanted to convey this message to the consumers and started the current consumption research by targeting apparel consumers who may play a vital role in shifting current fashion system toward a more sustainable direction. Therefore, the researcher's motive was indeed biased since he expects consumers to identify the appropriate style for them and hold onto that style for longer periods, which may enable them to consume more sustainably.

### **Reliability and Validity**

Trustworthiness is a major concern in the analysis of qualitative data. The researcher must avoid introducing conscious or unconscious bias which may impact the integrity and credibility of the data analysis, and thus may question the reliability and validity of findings.

Reliability represents the stability or consistency of the findings under the equivalent or identical conditions (Neuman, 2002). In this study, the data was collected through an in-depth interview. To ensure the reliability, the researcher conducted the interview with same interviewing technique and contents (questions) regardless of the groups of participants (faculty, staff, and students). As the data collection was laddering, some probing questions varied from person to person; which is typical in the laddering technique (Reynolds & Gutman, 1988).

In laddering, the sets of answers from the participants may be artificial (Veludo-de-Oliveira et al., 2006). Botschen, Thelen, and Pieters (1999) argued that some participants may respond in a rational way to make them justified as smart and

respectable. In addition, some participants may not always feel comfortable answering questions at the personal value level (Veludo-de-Oliveira et al., 2006). To deal with participants' artificial answers, the researcher asked the participants to refer to examples and make comparisons when needed. Additionally, the researcher did a communication check multiple times so that consistency of the answers could be established. The communication check was done by restating participants' answers for further validation of context and meaning of participants' answers to the interview questions. The participants, in turn, provided their opinions about the researcher's interpretation. Once the participants confirmed the researcher's statement of clarification, the researcher then advanced to the next question. In the end, the researcher included a question to the participants to talk about their clothing choice or consumption in general. The answer to this question also helped the researcher to assess the consistency of the responses to some extent.

It is very common during laddering interviews that the participants might become stuck at some point of the interview, which might prevent them to reach higher level of abstraction. This happens when the participants do not know the answer or they may be unable to articulate the reasons why they chose a specific attribute to achieve a particular value. The researcher dealt with this issue by directing the participants to think about a relevant prior situation from their experiences to assist in their recall of additional pertinent facts. Also, the researcher asked them, "How would you feel if the product was missing that attribute or the consequence (benefit) would not be delivered?" The clarifying questions based on participants' prior experience helped to strengthen the reliability of actual behaviors versus opinions about attributes not being delivered.

Validity refers to the truthfulness of findings. Validity confirms that the concept or idea fits within reality (Neuman, 2002). Simplistic analysis of the data is a common criticism for the laddering procedure that can threaten the validity of the findings. The researcher addressed this issue by analyzing the content of the transcribed files twice. The first-pass analysis of the transcribed files was done manually to identify the elements and record them in the spreadsheet. However, listing the elements was not enough to truly project participants' responses since the underlying context for a particular phenomenon might vary across the participants. Failure to overcome this issue may question the generalizability of findings to the research's subject. The second-pass analysis of the transcribed files was done during the construction of the implication matrix. In this analysis, the researcher did not search for an element only in a particular ladder; instead, the researcher scrutinized the entire conversation to find out what participants actually said and under which circumstances they said it. This approach to analysis facilitates the inference of underlying contexts of participants' answers. Moreover, this approach to analysis discovered participants' reality, thereby confirming the validity and the generalizability of findings to the research subjects.

A second measure taken by the researcher to strengthen the validity of findings was the use of a second pair of eyes throughout the data analysis, termed as peer debriefing (Creswell, 2007). The peer debriefing was needed to determine the findings fit within actual reality. An expert in the sustainable apparel consumption discipline reviewed all the data to make sure the categories were distinct, clear, and consistent with theory. The researcher reshaped some categories of elements after this review. External validity is required when a researcher aims to generalize the findings obtained from

different settings with many different people (Neuman, 2002). As generalization beyond the specific context discussed in this study was not the intended goal of this study, external validity was not necessarily required.

## CHAPTER IV

### FINDINGS

This chapter contains all the findings of the study. The chapter first describes participants' demographic information. Afterward, the results of the content analysis have been presented in the form of elements of means-end chain followed by the master list of elements. The implication matrix and the hierarchical value map (HVM) have been also discussed. Finally, this chapter presents the findings related to the study's research questions.

#### **Participants' Demographic and Product Longevity Information**

This study had twenty participants who were largely White American, and more than half of the participants were female (see Table 4.1). Half of the participants were above age 29. Further, ten participants reported an annual income that is less than \$30,000, and six participants reported annual income above \$30,000. Table 4.1 displays more specific demographic information of the participants. Participants' product longevity information reveals that most of the participants (thirteen) had used 4-6 clothing items for ten years, and 4 participants used 7-9 clothing items for ten years. Only 2 participants reported wearing more than 10 items for ten years. The study intended to identify participants who utilized a large portion of their wardrobe for ten years or more.

However, the number of clothing items reported by participants do not entirely comply with the participants' qualification, suggesting a change in the nature of this study regarding participants' qualification.

Table 4.1

*Demographic Characteristics and Product Longevity Information of Participants*

Total = 20 Participants		
Item	Category	Number of Participants
Gender	Male	9
	Female	11
Ethnicity	White American	11
	Asian	4
	Native American	3
	Black or African American	10
	Did not answer	10
Age	18 – 29	9
	30 – 39	4
	40 – 49	1
	50 – 59	2
	Above 59	3
	Did not answer	1
Income	Less than \$10,000	4
	\$10,000 - \$29,999	6
	\$30,000 - \$49,999	2
	\$50,000 - \$69,999	3
	\$70,000 - \$89,999	1
	Above \$90,000	1
	Did not answer	3
	Less than 4 items used for 10 years	1
Product longevity behavior	4 – 6 items used for 10 years	13
	7 – 9 items used for 10 years	4
	Above 9 items used for 10 years	2

**Elements of Means-End Chain**

The data were analyzed in three phases: content analysis, implication matrix, and hierarchical value map. Details of the three-phase data analysis have been outlined in Chapter 3. Using twenty interviews, the researcher identified nine different elements (see

Table 4.2) for the attributes of clothing product. The first seven elements were cited by several participants whereas the elements such as ‘outdated style,’ ‘classic style with a twist’ were mentioned by only one participant. Table 4.2 represents all the elements that were mentioned as the attribute of clothing product along with their characteristics.

Table 4.2

*Table of All Attributes*

Name of Attribute	Characteristics
Fit	Participants want clothing that appropriately fit their body.
Material	Participants consider the type and function of a material of which clothing is made of.
Price	Participants are price-conscious. They do not want to pay the higher price for a clothing product unless it is very beautiful and of superior quality.
Basic/Timeless style	Participants look for the basic, timeless or classic style that serves several purposes.
Durability in use	Participants want to wear clothing for long and therefore, they expect clothing to offer a reasonable durability in the use stage without developing defects.
Color	Color makes a clothing product look good and unique.
Brand	Participants buy some brands that fit them well, and offer quality products.
Outdated style*	Participants look for a style that has gone out of fashion.
Classic style with a twist*	Participants want classic with a little bit of variety like something special about design or the details of the button that make them different from mere classic.

*Note:* \* indicates emergent attribute. Rest of the attributes are theory driven.

Continuing with the same strategy, the researcher identified fifteen different elements for consequences. All of the elements except ‘feel curious,’ ‘avoid too much attention,’ and ‘conversation starter,’ were mentioned by more than two participants.

Table 4.3 represents all the elements mentioned as the consequences of clothing product along with their characteristics.

Table 4.3

*Table of All Consequences*

Name of Consequence	Characteristics
Last long	Participants want durable products that they may use for longer periods.
Stay in style long	Participants want something that prevails several fashion cycles.
Convenience	Participants prefer clothing that requires less maintenance to save time and avoid stress related to the maintenance.
Value for Money	Participants think they are efficiently spending their money on clothing.
Look good	Participants want to look good when wearing clothing.
Feel comfortable	Participants choose materials that are soft, comfortable, and do not itch.
Feel confidence	Participants feel confidence and self-stimulation when they are in an outfit.
Perform better*	Participants handle their tasks more effectively when their clothes do not come in the way of doing the tasks.
Support environment	Participants desire to support environment by choosing sustainable material.
Choose appropriate outfit*	Participants want to choose the best outfit depending on the season, event, and occasion.
Less consumption	Participants do not want to shop more and replace their clothing often.
Feel sentimental	Participants feel nostalgic and emotional when wearing certain clothing products.
Conversation starter	Participants wear clothing that draws attention from others so that they can start a meaningful conversation.
Avoid too much attention	Participants do not want to grab unnecessary attention from others by wearing trendy items, or garments with very bright and fancy color.
Feel curious*	Participants become curious or surprised to see some clothing made a long way in their wardrobe.

*Note:* \* indicates emergent consequence. Rest of the consequences are theory driven

The final set of elements refer to the highest level of elements, values. From the content analysis, the researcher identified eight different elements for the values. The element, ‘conformity’ was cited by 2 participants, and ‘uniqueness’ was mentioned by only one participant. The remaining elements were mentioned by more than 2



participants. Table 4.4 represents all the elements mentioned as the consequences of clothing product along with their characteristics.

Table 4.4

*Table of All Values*

Name of Consequences	Characteristics
Self-expression	Participants desire to express their identity or personality.
Self-respect	Participants believe in themselves and their self-confidence, and try to act self-consistent.
Social-recognition	Participants expect others to respect them and project self-image to others accordingly.
Protect planet	Participants reflect concern for the environment and nature since they care for protecting the planet.
Achievement	Participants want to attain personal success or to meet internal standards of excellence through demonstrating competence.
Hedonism	Participants feel delighted and sensuous gratification.
Conformity	Participants restrain from actions likely to upset others and violate social norms.
Uniqueness	Participants prefer individuality and one of a kind.

### **Master List of Elements**

Having identified all the elements for attributes, consequences and values, the next step was the selection of master elements that were needed for the construction of the implication matrix and HVM. The master elements were selected based on the number of participants indicating the elements. For instance, ‘outdated style’ (see Table 4.1) was mentioned by only one participant, as was ‘classic style with a twist.’ Therefore, these two elements were excluded from the master list (see Table 4.5) of attribute elements. The same strategy was followed to select the master list of elements for both consequences and values. The theoretical reason for considering elements mentioned by more than two participants was highlighted in chapter 3. In the master list, each element was assigned a separate number in an ascending manner, starting from categories of

attributes to categories of values. Each number represents the corresponding element in the implication matrix. Table 4.5 displays the master elements.

Table 4.5

*Master List of Elements and Assigned Numbers*

Key Elements	Elements with Assigned Number
Attributes	(1) Price (2) Material (3) Brand (4) Fit (5) Color (6) Basic/Simple/Timeless style (7) Durability in use
Consequences	(8) Last long (9) Stay in style longer (10) Value for Money (11) Look good (12) Feel comfortable (13) Feel confidence (14) Perform better (15) Support environment (16) Choose appropriate outfit (17) Convenience (18) Less consumption (19) Feel sentimental
Values	(20) Self-expression (21) Self-respect (22) Social recognition (23) Protect planet (24) Achievement (25) Hedonism

**Implication Matrix**

The master elements were arranged on a spreadsheet to form a matrix, termed as implication matrix. The technique to form implication matrix has been outlined in Chapter 3. The numbers on the first row and first column represents different master elements. For instance, number 10 represents ‘value for money.’ This matrix is

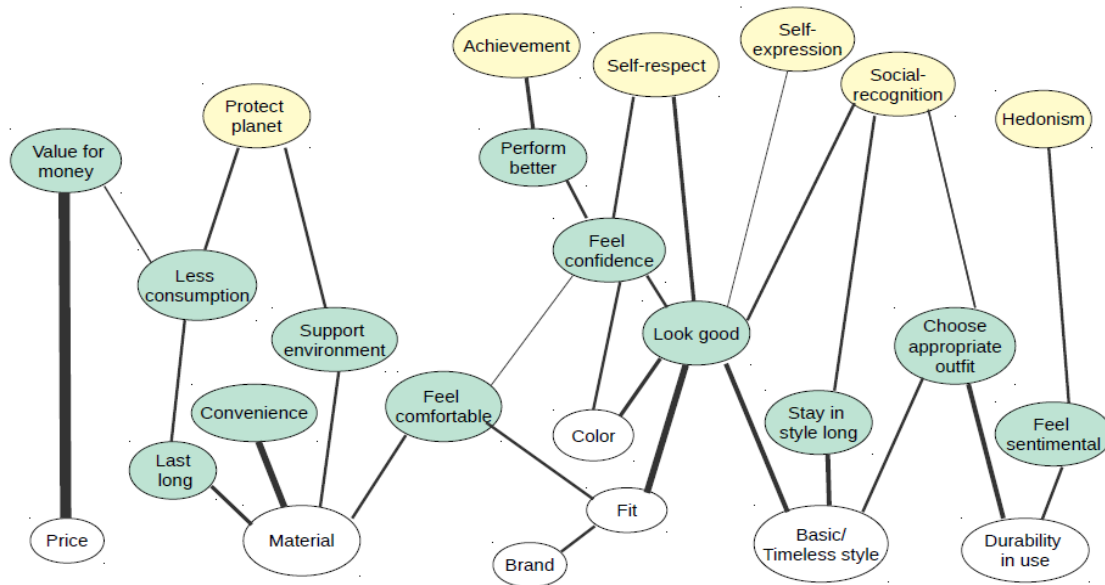
significant to determine the strength of relationship between two elements. For instance, the relationship between ‘look good (11)’ and ‘feel confidence (13)’ is represented by 5.03, implying five direct and three indirect relations between these two elements. More precisely, five participants stated that when they look good, they feel confidence whereas three participants mentioned indirect relationship between ‘look good’ and ‘feel confidence’ with a third element between these two. Figure 4.1 displays the implication matrix labeling the number of times all elements in the rows lead to all elements in the columns. The third column from the right naming with ‘From’ indicates how many times an element precedes other elements in the same row. The ‘To’ column indicates how many elements lead to a single element. Finally, the ‘sum’ column is the addition of column ‘From’ and column ‘To,’ suggesting the total frequencies of an elements mentioned by the participants both directly and indirectly.

		4	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	From	To	Sum
1	Price				12.00																12.00	0.00	12.00
2	Material		4.00		0.01		3.00	0.01	0.02	3.00		7.00	0.04			0.02		0.06	0.01		17.17	0.00	17.17
3	Brand	3.00	1.01		0.02							0.01	1.01		0.01						5.06	0.00	5.06
4	Fit					7.00	3.00	0.03	0.03					1.00		0.01	0.02		0.03		11.12	3.00	14.12
5	Color					4.00		3.02						1.00	0.01	0.01	0.01			0.02	8.07	0.00	8.07
6	Basic/Timeless style			5.00	0.01	5.02					3.00	0.01	0.01		2.05		0.05	0.01			15.16	0.00	15.16
7	Durability in use							1.00	1.01		5.00			3.00			0.01			0.03	10.05	0.00	10.05
8	Last long				2.00					0.02			3.00					0.03			5.05	5.01	10.06
9	Stay in style longer				1.00								2.00		3.00			0.01			6.01	5.00	11.01
10	Value for Money																				0.00	17.07	17.07
11	Look good							5.03	0.04						2.02	4.02	3.02				14.13	16.03	30.16
12	Feel comfortable				0.01			1.02	2.03							0.01			0.01		3.08	7.00	10.08
13	Feel confidence								3.00		0.01				1.00	3.01	0.01			1.00	8.03	10.08	18.11
14	Perform better																		4.00		4.00	6.11	10.11
15	Support environment																	3.00			3.00	3.04	6.04
16	Choose appropriate outfit					0.01						0.01			0.01		3.00				3.03	8.01	11.04
17	Convenience																		0.01		0.01	8.03	8.04
18	Less consumption				2.02					0.02		1.00			2.00	0.01		3.00			7.05	7.06	14.11
19	Feel sentimental																			3.00	3.00	4.04	7.04
20	Self-expression																				0.00	10.11	10.11
21	Self-respect																				0.00	8.10	8.10
22	Social recognition																				0.00	6.08	6.08
23	Protect planet																				0.00	6.11	6.11
24	Achievement																				0.00	4.06	4.06
25	Hedonism																				0.00	4.05	4.05

Figure 4.1. Implication Matrix. There are no relations between attributes 1 and 2-3; 1 and 5-8.

## Hierarchical Value Map

From the implication matrix, the researcher identified all the chains. These chains along with their interconnections with each other were displayed in a tree diagram, termed as hierarchical value map (HVM). The procedure for identifying the chains and drawing the tree diagram were broadly explained in Chapter 3. Figure 4.2 represents the HVM. At the lowest level of the HVM, attributes are presented in the white oval. The next level of the HVM displays the consequences that are presented in the green shape. Finally, the values, at the highest level of the chains, are presented in the yellow shape.



*Figure 4.2.* Hierarchical Value Map. The thickness of the line indicates the strength of direct relationship among the elements.

The HVM is significant in the sense that, while the implication matrix indicates the frequency of relationships among all the elements, the HVM shows the chains connecting personal values to desired product attributes. More precisely, the HVM reveals which personal value drives consumers to shop based on certain product

attributes. For instance, ‘protect planet’ affects consumers’ choice for certain materials, just as ‘self-respect’ influences consumers to shop based on ‘fit’ or ‘color.’ Further, the HVM portrays the interconnection among the significant chains in a manner that can be easily read and interpreted (Reynolds & Gutman, 1988). How all elements are connected to each other through the direct and indirect linkages can also be inferred from the HVM.

The construction of the implication matrix and the mapping of HVM provided insights for answering the study’s research questions. From the HVM, it is evident that four personal values drive participants’ consumption behavior: ‘protect planet,’ ‘achievement,’ ‘self-respect,’ ‘hedonism,’ and one utilitarian value: ‘value for money.’ Secondly, participants’ style is driven by two personal values: ‘self-expression’ and ‘social-recognition.’ In the following, the researcher presents each of those values by explaining all the chains that connect a value to desired product attributes. For instance, ‘protect planet’ is derived from ‘material’ through several chains. Each of these chains and their elements was explained to present the pattern, ‘material – protect planet.’ Additionally, participants’ direct quotes were added to support the presentation of findings.

### **Findings Related to Research Question 1**

*For consumers who exhibit a ‘long-term wear of clothing,’ what are the values that characterize their consumption behavior?*

#### **Price as Driven by Value for Money**

Participants predominantly appear as price conscious at the time of purchase. Participants perceive that clothing that is of good quality is priced higher. In such case,

participants are willing to pay the higher price because they can discern the long-term benefits that they will gain by wearing that product.

I do not want to keep going and buying new crap clothes that are not going to last. That is wasting a lot of money. You can buy a hundred Walmart shirts for \$5 or you can buy one good shirt for \$50 and save a lot of money in the long run but have a better product for the same cost (Participant M).

I want my clothes to last. If I am going to spend a little bit of money on clothes, then I want them to still be there for a long time (Participant M).

Some Participants are aware of the higher price of clothing that is of good quality but they take a different way to acquire the high-quality product. Most of the time, these participants look for the sales promotions to avoid the premium price. They even shop at Goodwill, second-hand store or the stores (e.g. Ross) that typically offer high-quality product at a discounted price. By being able to purchase this way, participants reflect their positive association with minimizing cost and maximizing outcomes.

I will pay full price if I have to. But first, I will look for to see if they have a clearance table (Participant L).

The study found participants' tendency toward the purchase at sale is mostly attributed to their income, shopping knowledge as well. Most of the participants looking for sales promotions to meet their demand for quality clothing earn less than US average, \$31,099 (U.S. Bureau of the Census, 2018). They know pretty well when and how they can get quality products at a relatively lower price, which was confirmed by Participant L who reported annual income (below \$10,000) that is lower than US average.

There's a place in Tulsa where I will buy jeans. They have their full-priced Wrangler jeans but then, they also have a table with clearance Wrangler jeans. So, if I can buy the same product that is maybe a year old or cheaper, then I will do that (Participant L).

Another participant (with income \$10,000 - \$29,999) asserts,

Because in today's market, any kind of material like cotton or silk, whatever I am looking for, I can get it at a cheap price, even the best quality (Participant S).

The above two quotes imply participants' knowledge of the time, location or stores for finding products with a sale. In summary, the study found that participants want to attain the value against 'price' by purchasing clothing that lasts longer periods and serves participants' need in the long run. Participants associate higher price with product quality and most often pay the premium price.

### **Material as Driven by Protect Planet**

Participants are concerned about protecting the planet. Participants emphasized awareness on their consumption process, suggesting they are conscious about how their consumption behavior may impact the environment in an adverse way. This pattern, with its only attribute, generates four distinguishable consequences, 'last long,' 'less consumption,' 'convenience,' 'feel comfortable,' thereby implying a large number of association among the elements.

A significant factor associated with the choice of material producing a clothing item is the way it has to be treated or maintained. Nearly all the participants perceive the importance of proper treatment to make clothing last. For some participants, proper care or maintenance of clothing stems from the 'value for money.' Following instructions on

the care label, maintaining washer and dryer's temperature, and laundering by hand wash or dry clean whenever needed reflects their concern for the proper treatment of clothing product.

It is not always about the product. It is about how you treat it. Even if the product is really nice and it is really good quality, but you treat it in a bad way, then obviously it is going to go bad. It is not a living thing. It does not refresh itself (Participant L).

Despite participants' awareness for the adequate treatment of clothing, participants prefer clothing that requires less maintenance to save time and avoid stress, implying 'convenience' as the potential benefits that the participants want to attain. For instance, garments made from wool lose their shape when washed. Hence, they need to be dry cleaned that causes participants extra-work. In this study, participants expressed a greater dislike for clothing that needs extra care, especially those garments requiring dry-cleaning and ironing because of the wrinkles it gets after washing.

There are some products like linen that have to be ironed a lot. I like linens but I do not buy them because they have to be ironed and they cannot be washed (Participant R).

'Convenience' was mentioned both in terms of time and cost. Special treatment requires participants consuming more time and spending for additional cost. However, participants mostly care about time over cost required for special treatment. Nearly all the participants indicated 'convenience' relates it to time over cost.

If I can buy a piece of clothing that is \$10 more but that can be easily maintained, then I would go for that because that will save my time over a period of my life



like 10 years, and I do not have to worry about ironing or I do not have to waste time (Participant F).

The other two chains produced from ‘material’ elucidate participants’ positive intention to address environmental awareness, that brings two significant consequences, ‘last long’ and ‘support environment’ into the pattern. Participants want to have clothing made from sustainable materials in their wardrobe to support the environment. However, their entire wardrobes do not reflect clothing acquisition being driven by sustainable material or products but just a fraction of the wardrobe does. Very few participants also indicated their concern for the clothes made by the brand that has a long tradition of following environmentally friendly production process.

In this study, the participants were more interested in addressing sustainable consumption by extending the life of clothing rather than choosing natural or recycled material, which highlights the implication of the second chain (material – last long – less consumption – protect planet). Participants want to reduce the amount of consumption by purchasing material that lasts longer. Participants perceive that reducing overconsumption is beneficial to the environment since it has the potential to reduce clothing waste.

I want my product to last long because it is creating less waste and that is what I perceive as sustainability (Participant T).

Moreover, ‘less consumption’ is also attributed to financial concern for some participants. Participants place importance on ‘value for money’, which motivate them to buy quality over quantity. However, for the most part, less consumption is driven by their concerns about achieving environmental sustainability than to financial benefits.

I am a sustainable person. It is for the sustainability for sure that I do not want to keep buying products (Participant T).

It is understood that the participants, in this study, are influenced by their concerns about sustainability, and many mentioned their underlying values for ‘protecting the planet.’ However, most of the participants do not entirely incorporate sustainability into their wardrobes or clothing consumption practices. Participants relate sustainability mostly to reducing waste by decreasing consumption than to purchasing sustainable material.

### **Brand, Fit, Color as Driven by Achievement and Self-respect**

This pattern displays ‘achievement’ and ‘self-respect’ as the strong anchor. This pattern has the highest number of attributes leading to several consequences, thereby producing the longest chain in the HVM. This is the only pattern where the study found relationship between two attribute elements, ‘brand’ and ‘fit.’ After trying several brands, participants realize that certain brands fit them well. Therefore, they try to stick to that brand, meaning their brand loyalty to some extent.

I tried things on but I found it like the most expensive brand really fits me better, which is good in bad because the most expensive brand is of higher quality and I usually buy one (Participant F).

‘Look good’ appears as the first significant benefit that the participants want to achieve by choosing all the three attributes in a clothing item. The implication matrix (see Figure 4.1) indicates that ‘look good’ has higher association with other elements, suggesting the large number of participants stated their concern about the appearance

they want to make with their clothing. Participants prefer certain colors and base their shopping on how appropriately a color matches with their skin or body.

Color is important to me. I found that certain colors make me look so much better.

It is just a good tone for my skin or my hair, I do not know what it is but I love the color dark blue or navy blue. It is just meant for me. So, color is so important to me (Participant T).

‘Color’ is also associated with participants’ feelings. Participants stated that color elevates their mood and thus, helps them to project more confidence. Some participants also reported that color makes a product unique.

‘Fit’ largely concerns ‘looking good.’ In fact, it has second higher direct relations to a consequence element after ‘price.’ Participants base their clothing purchase on the fitness of the garment to their body. Besides, participants relate the attribute, ‘fit’ to the consequence, ‘feel comfortable.’ Looking at the HVM, it is evident that comfort is preceded by ‘material,’ suggesting both ‘fit’ and ‘material’ of clothing deliver comfort to its wearers.

*(Fit - Look good)* Fit matters because it makes me look good. So, bad fit mostly ruins the aesthetic, the way the person appears and it makes them look ridiculous (Participant T).

*(Fit - Feel comfortable)* If it is too loose, it does not look good. If it is too tight, it will keep on pestering me. Even for the shoes, if it is too loose, I will have to open them several times and make them tight and I will not feel comfortable and good (Participant L).

Participants value ‘comfort’ and ‘look good’ since these are directly linked to the feeling participants have when they are in an outfit. Both ‘look good’ and ‘feel comfortable’ influence participants feeling that helps them to concentrate on their work and accomplish the objectives related to a task. Whatever the task participants perform, they would like to be able to do it without clothing coming in the way of them having to perform that task. In this sense, ‘feel confidence’ facilitates the fulfillment of participants’ tasks, thereby indicating the second most important value of this pattern, ‘achievement.’

If I feel good, maybe, I will project more confidence. So, I always like to look good to feel confidence, to pretend that I know what I am talking about. It (clothing) is a suit of armor. So, you know you can face the world with your best things, like lipstick. You look good and feel better with lipstick though there is no functionality (Participant K).

The most important value in this pattern refers to ‘self-respect.’ Participants’ ‘self-respect’ is supported by their desire to ‘look good’ and ‘feel confidence’ in clothing. Although social acceptance somewhat affects participants’ desire for looking good, participants do typically base their appearance on the perception of themselves than others. Participants care who they are and how they can consistently be themselves with the right choice of clothing.

It is just a good feeling when you can be yourself in so many aspects. I think it is cool when you can choose whatever you want. People may have different ideas of you but it is still your choice in the first place (Participant G).

This pattern delineates strong association for the participants' appearance in terms of self rather than in terms of social acceptance. In terms of gender demographic, females were found to be more conscious of appearance than that of males. To summarize this pattern, the participants prefer clothing with attributes like 'color,' 'brand,' 'fit' to form a decent appearance of themselves for attaining ends like 'self-respect' and 'achievement.'

### **Durability in Use as Driven by Hedonism**

This pattern leads to the single end, 'hedonism' that is realized by consumers' sentimental feeling associated with clothing. Nevertheless, the chain is affected by the utilitarian benefit, 'choosing appropriate outfit.' This pattern is supported by a single attribute, 'durability in use' that refers to the participants' long-term wear of clothing. The benefits of this attribute are hardly realized at the purchase point; rather, participants begin to relish the benefits of this attribute in the long-term use of clothing.

At that point in time, I never concentrated so much whether they would be durable but now I know that they are really durable. And that makes me feel like I can continue wearing them or use them for almost a decade (Participant S).

The first significant consequence gained from 'durability in use' is 'choosing appropriate outfit.' Most of the participants perceive their oldest clothing (that is still functional) as the best outfit since they have been already tested and worked out multiple times. Participants project greater confidence in those outfits, which lead them to put on these items for different kind of events or occasions.

The nicest thing about having a wardrobe for a decade is that I do not have to think too much about it. It is simplified and it is curated. These are really the products that have been left for decades and are probably the favorite items. I

know they are good, they are going to fit well, and in what situation I should wear them (Participant F).

The second most important consequence implies hedonic benefit. Some participants feel nostalgic or attached to certain clothing products that they have been using for a long time. For these participants, this feeling is more of emotional attachment than of functional attachment where memories and past events were frequently cited as the driving force by the participants.

I feel attached because they have been with me for so long. I feel sad if something happens to them (Participant R).

A significant proportion of the participants simultaneously referred to functional attachment in addition to emotional attachment when it comes to extending the use of clothing. Functional attachment was identified where the participants were still wearing the items rather than only retaining it in wardrobe.

I think, it is not only memories that makes me feel attached. The memories are just part of it. Just because the style is so good, it fits and makes me look nice, it fits nice in the hip, it fits good in the thighs, and also the cuff and the length of the jeans are so perfect for my height (Participant T).

To summarize, participants' responses indicate hedonic value that is derived from the attribute, 'durability in use.' The pattern reaches the end level (value) in terms of hedonic concern. The benefits of hedonic consumption were achieved when participants gain pleasure or feel sensuous gratification relevant to product use.

## **Findings Related to Research Question 2**

*For consumers who exhibit a 'long-term wear of clothing,' what are the values that characterize their style?*

### **Basic/Timeless Style as Driven by Self-expression and Social-recognition**

This pattern exhibits values concerning both self and social influence.

Participants' responses yield the chains connecting both the values to the single attribute, 'basic/timeless style.' Participants perceive 'basic style' to be a product with simple design and cut, which prevails for multiple fashion cycles and remains up-to-date for longer periods. In this sense, participants' perception of 'basic' is what the literature describes as 'classic,' the style that gains ongoing acceptance for about a decade or longer (Sproles, 1981). The significant benefit of keeping clothes with basic style in the wardrobe is the long-term usability they offer in terms of fashion or general acceptance.

You know that at least, part of your wardrobe will always be in style. You do not have to replenish your wardrobe so often because it should be in style if you have a basic design (Participant C).

Being able to stay in 'style for long' with the purchase of 'basic style,' participants also economize on their resources spent on clothing. As basic or timeless items do not go out of style, it decreases the need for spending money repeatedly on new clothes.

Another dimension of using clothing items that 'stay in style long' is the participants' desire for expressing the consistent nature of their personal taste or identity. Some participants prefer basic or timeless style because they think it projects their self-images. Typically, consumers' personal value (e.g. self-expression) is driven by single or multiple benefits that are fulfilled through the purchase of a product with desired

attributes. Interestingly, the study found a direct association (two direct relations) between a personal value (self-expression) and a product attribute (basic or timeless style).

I think for me like it is somewhat my identity and my identity does not really change. So, I do not have to worry about changing based on my identity. It is just always me (Participant O).

Both ‘self-expression’ and ‘social recognition’ are led by the look that the timeless or classic style delivers. The implication matrix (see Figure 4.1) suggests that these two values are directly related to ‘look good.’ Participants have a preference for timeless or classic style since they desire to ‘look good’, which eventually enables the participants to create a strong image (self-expression) of themselves and convey it to others (social recognition).

The clothing I wear does tell something about me. In certain places, I do like to express myself. For example, when I am in the classroom, I am dressing beyond what the students are dressing. That way, I am telling them that I am your authority (Participant F).

I think, how you project yourself is very important. I want to be thought of as a professional person that is on top of things and I think how and what you wear is part of the presentation that you make of yourself to others (Participant A).

The HVM indicates a chain connecting ‘self-respect’ to the attribute, style through the consequence, ‘look good,’ suggesting participants’ choice of style is influenced by ‘self-



respect.’ However, ‘self-respect’ were frequently cited in relation to the attributes such as brand, fit, and color rather than style.

Participants’ preference for basic or classic style is determined by a third benefit, ‘choose appropriate outfit.’ Basic or classic style is easy to match with other clothing items when choosing an outfit, strengthening participants’ capacity for mindful choice of clothing depending on the nature of professions they are in, or the type of events they are attending to.

My style is all over the place. When I am hanging out with my friends in California and San Francisco I know who I am then. When I am in Stillwater Oklahoma as a teacher and a student, I know who I am then (Participant F).

In summary, the participants’ choice of ‘basic or timeless style’ is largely evaluated by self than social-orientation, yet both have a significant effect on the choice of clothing. For the participants in this study, the influence of social recognition should not be understood from the perspective of conformity or social pressure. Participants, in this study, do not necessarily base their choice of style on social trends or peer pressure, neither do they feel pressure for following trendy items and style that they do not like. Participants perceive that with classic styles, one does not have to dress in a way to receive acceptance or social recognition because acceptance or recognition has already been prized with classic style. For example, a participant said,

As with a classic style there isn't much to criticize. You cannot really criticize it. Like you cannot say, “oh you are not up to date.” But at the same time, you would say, “Oh that is a real classic style that looks good on everything” (Participant M).

### Emergence of a Value from the Disposal Phase

Although participants' responses reveal egoistic and biospheric values, the study observed the emergence of altruistic value in terms of participants' disposal behavior. Participants dispose of clothing in the form of reselling, donation, reuse or discarding (Shim, 1995). In this study, participants predominantly identified disposing of their clothing items by donation (13 participants, see Table 4.6), suggesting the positivity of altruistic motives underlying their disposal behavior. However, this value does not appear in the HVM since participants hardly think of disposal methods when they purchase the product based on different attributes.

Table 4.6

#### *Disposal Methods*

Methods	Number of Participants Utilized the Method
Resell	1
Donation	13
Reuse	7
Discard	2

Two reasons were identified for the donation: care for others and care for the environment. Participants possess strong intention for helping others who are in need and therefore, donate clothes to the Goodwill, Salvation Army or other charities.

Helping others by donation is important to me. It is how we stick together. We work best together. Some people are really alone and some people are not but there is only one earth. We are not going to fix anything if we do not work together or help each other. It is going to make things worse (Participant G).

For some Participants, the motivation underpinning donation stems from the personal life-experiences. Participants who went experienced challenging financial circumstances at any time of their lives reported a willingness to donate.

I know it when I was in high school. I was super broken. People donated clothes to my family and so it is always nice to give back every time I do have  
(Participant E).

Donation is also attributed to the recycling of clothes that indicates participants' environmental concerns. This study found some participants donating clothes to the facilities that are known for collecting used clothes. Participants perceive that clothes that are thrown away in the trash go to landfills, which, in turn, increases waste and damages the environment.

I know there are so many world organizations like Urban Outfitters, H&M. They take the scraps of the clothes and make something completely new out of them. I like that concept. If it is someone else who has a little bit more experience with the recycle of clothing and he can use it for something else. I would rather go out that way instead of being thrown away (Participant C).

I think other people can benefit from it if I donate it. I think it is a shame to throw it away and not reuse it if it is possible. It is just wasted (Participant C).

The last quote mentioned above reflects participants' view about caring for others and for the environment as well. Most of the participants who demonstrate that view do not belong to the category that is scientifically knowledgeable of clothing research, yet they perceive their actions have effect on the environment and other peoples' lives. This finding is supportive of Lundblad and Davis (2016) asserting that consumers do not

necessarily require an expert level of knowledge to understand the environmental issues of clothing consumption.

This chapter addressed the findings related to the study's research questions by explaining the characteristics of HVM and providing evidence from participants' direct quotes. In the next chapter, the researcher has broadly described the findings related research questions.

## CHAPTER V

### DISCUSSION AND CONCLUSION

The need for conducting the current research was stemmed from a number of potential gaps in style consumption (SC) research. Despite the argument that SC promotes sustainable consumption, the literature lacks research investigating actual sustainable consumption behavior. The proposition made by Cooper et al. (2015) suggesting the long-term wear of clothing to be the most significant behavior in sustainable clothing consumption motivated the researcher to conduct the current study. It was realized that exploration of style requires an in-depth investigation of consumption cases where there is product longevity. Therefore, the purpose of this study was to develop a better understanding of SC by investigating consumption behavior in which consumers report product longevity with their clothing.

This chapter was organized to provide an interpretive discussion of the study's findings related to research questions along with the number of participants (presented in parenthesis) referring to corresponding values. Afterward, the implications of the findings of this study were outlined. Finally, the researcher elucidated the limitations of this study and recommended potential areas of research for future studies.

## Values and Consumption Behavior

The first objective of this study was to identify values that characterize individuals' consumption behavior in the context of product longevity. The study identified four personal values that fall into two categories: altruistic values and biospheric values (Stern et al., 1993). Besides, participants' responses indicate their concerns about altruistic values that were confirmed by their donation behavior during the disposal phase of clothing. Table 5.1 represents the categories of values identified relevant to consumption behavior.

Table 5.1

### *Value Orientation Related to Consumption Behavior*

Category	Name of the Value
Egoistic	Self-respect
	Achievement
	Hedonism
Biospheric	Protect Planet
Altruistic	Care for others

Although participants are driven by biospheric values, egoistic concerns were signaled in more ladders than biospheric concern. Participants' personal values such as 'self-respect,' 'achievement,' and 'hedonism' talk about their propensity for placing more importance on egoistic concerns over biospheric concerns.

The underlying motivations of 'achievement' can be understood both in terms of meeting internal standards of excellence as well as characterizing competence according to social or cultural standards (Schwartz, 1992). However, all participants (four) reporting achievement were concerned about gaining internal standard of excellence rather than meeting social norms or standards. This finding supports the argument made by

McClelland et al. (1953) that identifies the self-directed aspect of ‘achievement.’ To emphasize, ‘achievement’ in the current study should not be confused with Rokeach (1973) and Maslow (1959) who define achievement as demonstrating competence according to social standards.

Participants base their clothing on a range of attributes that can be specific to participants’ configuration in this study, yet the breadth of attributes identified supports Lundblad and Davies, 2016, and Niinimäki (2010) submitting that consumers choose clothing not merely on core product attributes (e.g., color, design, fit) or the attributes relevant to sustainability (e.g., natural material, eco-friendly production) but on a combination of both. The higher existence of a product’s utilitarian, social, and psychological benefits such as ‘feel comfortable,’ ‘look good,’ ‘perform better,’ ‘value for money, and ‘feel sentimental’ provides some evidence that participants pursue individual benefits and typically base their shopping on personal and economic needs. The implication of this finding for clothing retailer suggests that clothing retailers, especially those who incorporate sustainability into their business principles should not overlook the social and psychological benefits of a product. It is doubtful that participants would shop entirely for biospheric reasons until the products offered provide meaningful psychological and social benefits.

The study’s finding concerning participants’ perception of sustainability is quite interesting. Participants perceive sustainability as creating less clothing waste. By being able to use longer-lasting products, participants reduce the amount of clothing waste throughout the product lifecycle. This finding implies that for some consumers, sustainable consumption relates more to buying products with longer lifecycles than

those made of natural materials or environmentally friendly production technique. Therefore, the study further affirms the proposition made by Cooper (2010) and Chapman (2015) who emphasize on extending product lifespan to address sustainable consumption. In addition, participants' propensity for consuming in ways to reduce environmental impact rather than consuming products made with ethical labor practice and production methods highlights the importance of environmental sustainability over social and economic sustainability. In line with dominant fashion literature addressing sustainability (e.g. Van Liere & Dunlap, 1981; Cho et al., 2015), this study found females (five females and one males) to be somewhat more concerned about sustainable consumption than males.

Although the role of hedonism on the choice of attributes at the purchase point was not significantly observed, it is equally important for the long-term use of clothing. A product's value becomes more meaningful to its users when they gain pleasure and sensual gratification by using that product. It is difficult to conclude when a product will become meaningful to its users. Schmitt (1999) suggests that a product may generate meaningful emotional, cognitive, and behavioral response during any phase of products life cycle. In fact, this study identified a participant who encountered significant emotional and behavioral experiences with some of his clothing items after having them used for five years, which made the participant feel that he could continue wearing them for almost a decade. Therefore, the power of hedonism for the long-term use of clothing should be equally justified.



## Values and Style

The second objective of this study was to explore the values that characterize consumers' style. Personal style is a distinctive mode of tailoring (Otnes & Zayer, 2012) or a certain way of dressing (Hebdige, 1979). 'Self-expression' and 'social recognition' were identified to be the values characterizing participants' style. Table 5.2 represents the categories of values identified relevant to style.

Table 5.2

### *Value Orientation Related to Style*

Category	Name of the Value
Egoistic	Self-expression
	Social-recognition

Most of the participants (sixteen participants) are highly conscious of the image that they project to themselves and to others with the right choice of style. The linkage between appearance and 'social-recognition' concurs with the findings of Hines and O'Neal (1995) that reports a higher association between 'look good' (that derive from appearance) and 'social-recognition.' However, the study found participants' tendency for projecting self and building appearance are extremely driven by internal motivation. Twelve participants reported that the projection of decent appearance derives from internal stimulus of satisfying self. Therefore, participants' egoistic value such as self-expression and social recognition should not be confused with the dominant fashion consumption paradigm (e.g., Richins, 1994; Gabriel and Lang, 1995; Easey, 2002) suggesting clothing consumption is influenced by group conformity or social pressure. Participants, in this study, do not necessarily base their choice of style on gaining social acceptance, neither do they feel external pressure to follow the trends. At the same time,

participants are more drawn to basic or classic style, which helps them to meet their internal standard without being compelled for meeting social norm or pressure.

### **Understanding of Style Consumption**

The purpose of this study was to develop an understanding of style consumption by investigating consumption behavior in which consumers report product longevity with their clothing. The values identified characterizing participants' consumption behavior as well as style offer valuable insights into the different aspect style consumption behavior.

### **Self-image in Style Consumption**

Establishing self-image is always an end goal associated with clothing consumption no matter who the consumers are, either style-oriented or not (Marsh et al., 2010; Cho et al., 2015). However, how consumers view self-image is what makes them different from other consumer groups (Solomon, 2004). Participants who reported consistent use of style were not urged by the excessive need for uniqueness that prompts consumers to pursue differentiation from others by the frequent change of style. Instead, participants prefer clothing items that reflect their personal taste over mainstream items that are popular during a particular time. Thus, the current study states that consumers who demonstrate SC behavior possess a non-trendy self-image that does not change over time. Participants who reported consistent use of style were aged above 30. Five participants who were below 25 claimed that they prefer style over fashion or trends, but two of their responses about their purchase experiences imply that they sometimes fall into the prey of trends. Therefore, this study suggests that individuals' self-image transitions to style orientation as they get older, typically at the age of 25-30.

### **Fashion Consciousness in Style Consumption**

A noteworthy point segregating style consumption from the regular clothing consumption is the notion of fashion consciousness. A significant number (thirteen) of participants in this study expressed their interest in current fashions. Nevertheless, nearly all of them (eleven participants) stated that they are not affected by current fashion or trend. Participants, in this study, perceive fashion consciousness as knowing self and dressing accordingly rather than going with trends and changing style frequently. This does imply a relatively more nuanced clarification of the participants' perception of fashion consciousness since a number of prior studies view fashion consciousness as seeking novelty that incites replacement of clothing frequently. Therefore, participants' perception of fashion consciousness, in this study, indicates a contrasting view with the dominant fashion paradigm (e.g. Shim & Gehrt, 1996; Wesley et al., 2006) that defines fashion consciousness as seeking novelty. In fact, this study found participants' fashion consciousness aligns with Cho et al.'s (2015) argument that consumers' perception of fashion consciousness is driven by identifying an appropriate style that communicates their identity.

### **Frugality in Style Consumption**

Although a few numbers of participants directly referred to frugality when talking about their style behavior, the preference for purchasing classic items expressed by a large number of participants indicates a potential association between style consumption and frugality, which is supportive of Cho et al. (2015). The higher association between classic items and frugality is further supported by participants' concern for 'value for money.' The study's findings reveal that 'value for money' derives from buying less or

consuming less that is delivered when a product lasts long. Typically, classic products are of superior quality and therefore, last long (Stone & Farnan, 2018). Furthermore, classic products connote good taste in clothing, which facilitates fashion acceptance over longer periods (Stone & Farnan, 2018). Individuals with classic style, therefore, do not necessarily feel compelled to replace their wardrobe with new items. In this study, many participants' mentioned that they adopted classic style since it negates the need for going with the trends to appear fashion conscious, and compliance with the trends requires spending money repeatedly. By being able to adopt classic style in the consumption process, participants demonstrated their intention to minimize the quantity of clothing owned (less consumption) and thereby, economize monetary and material resources. Therefore, this study suggests that tendency to consume frugally may reduce the tension between fashion consciousness and style consumption by shifting consumers' focus toward classic style.

### **Product Attachment in Style Consumption**

The proposition that style motivates consumers to use clothing longer by developing emotional attachment (Cho et al., 2015), was recognized by a few numbers of participants in this study. Participants indeed developed an attachment with clothing products that they used for longer periods. However, that attachment was frequently cited both in terms of functional attachment and emotional attachment. Nearly half of the participants reported several functional benefits for using a clothing item for longer periods in addition to the emotional responses or sentimental feelings associated with the product usage. For instance, exceptional color, proper fit, high quality, expensive product were cited as the underlying factors of attachment. Some participants also indicated the

desired appearance delivered by the product as a factor that reinforces attachment with clothing. Besides, the influence of both functional and emotional attachment was significantly evident in cases where participants reported wearing clothing rather than just keeping it in wardrobe as part of the memories. Therefore, this study suggests both functional and emotional attachment foster long-term wear of clothing in style consumption behavior. Without clothing product offering functional benefits, it is doubtful that consumers would wear the product just because of the emotional link, yet the significance of emotional link should not be overlooked because of its potential for preventing clothing disposal (Mugge et al., 2006; Niinimäki & Armstrong, 2013).

Besides, participants' consumption behavior uncovered some other aspects of style consumption that were not portrayed by prior studies. Kaiser (1997) emphasizes that the multifunctional nature of clothing increases the gap between individuals' attitude and behavior relevant to clothing consumption. For instance, clothing is a shield or a second skin that protects the body (O'Cass, 2000), a tool that constructs meanings about its wearer (Kaiser, 1997), and a non-verbal media that conveys a person's identity to others (Jhonson et al., 2002). Besides, the discretion between attitude and behavior stems from other more important determinants of purchase decisions including price, trends and brand image (Solomon, 2004). However, the attitude-behavior gap that is quite common in regular clothing consumption, was found less in style consumption behavior. Participants' responses revealed a relatively low disconnection between their attitude and actions. For instance, participants who possess positive attitude toward sustainable consumption were found to prolong product usage, a significant behavior in sustainable consumption. Besides, among participants possessing attitude toward the consistent use

of style, few participants (only two) reported of being affected by the trends sometimes, suggesting lower number of participants demonstrate attitude-behavior gap. Another noticeable singularity found in style consumption relates pleasure associated with clothing consumption. Contrary to prior research that informs the benefits of hedonistic consumption derive from the act of shopping, possessing, and using the objects (Schaefer and Crane, 2005), this study identified the benefits of hedonism lie in the act of long-term use rather than the purchase and the possession of clothing.

### **Implications**

A study, by utilizing means-end chain, can measure the entire range of personal values relevant to clothing consumption, and establish precise links among constructs at various level of abstraction. The use of means-end chain, therefore, may provide a useful approach in researching values in style consumption.

The values identified in this study can be applied by the consumer behavior researchers in the evaluation of individuals' clothing consumption behavior. Since the study separates egoistic, biospheric, and altruistic values based on the phases of consumption process, researchers can utilize these methods to address various consumption related topics. For example, researchers can assess the role of a specific type of value on product attributes or compare types of value in each consumption phases.

Participants' action for lengthening product life was found to have a higher potential for integrating sustainability into their consumption process (Cooper 2010; Chapman, 2015). Therefore, manufacturers should emphasize more on extending product lifespan. More educational and social events could be organized to convey the message

that extended product life-span is equally vital in sustainable clothing consumption in addition to the purchase of natural or sustainable material. This will act as a double-edged sword. Primarily, buyers of natural or sustainable material will become more sustainable regarding their product usage. At the same time, buyers of unsustainable material will discern the importance of extended product usage, and thereby, might be persuaded to lengthen product life even if the product is made of unsustainable material. This will certainly reverse the negative environmental impact of unsustainable material to some extent.

Participants, in this study, are more inclined toward style over fashion or trends. More specifically, participants prefer classic style when it comes to buying high-end products. Therefore, the promising target market for clothing retailers offering classic products should be the consumer group who wear clothing for more extended periods. Participants' motivations for purchasing classic styles is driven by internal goal than external influences from social norms or group conformity. Therefore, this group of consumers is less prone to the change of style. If an apparel brand or company can heighten a product's long-term functional, social and psychological benefits by appropriate marketing and promotional programs, this group of consumers may be loyal to the corresponding brand for a long time.

In addition, participants reported shopping during sales promotions and at second-hand stores, especially those who have comparatively lower income than US average. The study, therefore, suggests the discounted and second-hand chain to place their stores depending on the income demographic.

This study is one of the very few for the research area dealing with style consumption. To the researcher's best knowledge, this study is the first of its kind that highlights personal values driving clothing consumption behavior in regards to style through the use of means-end chain. Therefore, researchers can continue to build on this study to theoretically develop the concept of style consumption by utilizing personal values identified in this study

### **Limitations and Suggestions for Future Research**

Although this study offers valuable insights into style consumption behavior, it has some limitations as well. The findings of this study are tentative, which may be further substantiated through the lens of quantitative analysis or statistical measurement, a potential scope for future research.

The second limitation is linked to the use of means-end chain that treats the participants collectively, thereby limiting the prediction of any specific action. It does mean that no single participant represents all the chain mentioned in the HVM, nor do all participants represent a particular chain. To summarize, all participants may not be driven by all the aforementioned values and benefits. Indeed, data from participants' responses indicate multiple patterns that conflict with each other. This warrants a prospective direction for future research with the goal of customer segmentation based on personal values. Merging laddering data offered by this study with a segmentation approach may uncover valuable insights into the distinguishable value characteristics across different consumer groups. Profiling consumers based on the value characteristics would help the retailers to implement marketing initiatives.



Additionally, the HVM does not reflect the comprehensive richness of the data (Velodu-de-Oliveira et al., 2006). Several associations among the elements of means-end chain were observed, implying interesting phenomena (e.g., classic style with a twist), yet these associations did not appear on the HVM due to their lower frequency within the data. Gengler and Reynolds (1995) define this as a limitation of laddering data analysis, that restricts the researcher to a ‘balancing task’ between laddering data analysis and mapping HVM. Nevertheless, those potentially interesting phenomena signal prospects for future research.

Another limitation of the study is the size of the sample. The researcher sent the mass email to participate in the study through Qualtrics. This type of mass email often results spam, preventing participation in the study. Consequently, this might have resulted in low response from the recipients’ end. The study included twenty participants, a small sample. So, the generalization of findings beyond this specific context is highly restricted, yet the findings may provide some valuable insights to researchers and practitioners. The mass email asked for participants who have a wardrobe that they had been using for ten years, and participants were supposed to sign up for the interviews based on this requirement. Before beginning the interviews, the researcher asked the participants how many clothing items in their wardrobe were used for ten years. Many participants reported a small number of clothing items (see Table 4.1) that they used for ten years or more. This implies that many of the participants did not utilize the large portion of their wardrobe for ten years, indicating a potential limitation regarding the qualification of participants in this study. Besides, the small sample size and sample’s income demographic information refer to other potential limitations of this study. Ten

participants reported an annual income that is lower than \$30,000, suggesting participants may use their clothing for longer periods because they cannot afford more frequent purchases.

### **Conclusion**

Although style has been a theme of interest in the literature for long, style consumption (SC) has recently been identified in the exploration of sustainable clothing consumption. Incorporation of product longevity into the discussion of SC research offered potential approaches for investigating actual sustainable consumption behaviors. Therefore, SC research should be inclusive of product longevity cases along with mere general consumption cases. The unsustainable growth of clothing consumption has made SC research more important than ever since SC may offer a potential means to the end of achieving sustainable clothing consumption.

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## APPENDICES

### Appendix A

#### Email recruitment

Email subject: Participate in an interview: Chance to win \$50

Hello,

Do you have wardrobe that you have been using for 10 years or more? If so, then you are an ideal participant for this research study.

I am conducting interviews to understand consumers' style in cases where the wardrobe is utilized for a long period of time. Style is a specific mode of tailoring or a certain way of dressing. If you commonly wear clothing for 10 years or more, you are welcome to participate in this research study. The interview will require 40-50 minutes of your time. **I am currently recruiting 15-20 participants, and one participant will be rewarded a \$50 cash incentive through a random drawing.** To participate, click on the link below to provide your name, email, demographic information, and then, schedule the interview at your convenient time.

[https://okstateches.az1.qualtrics.com/jfe/form/SV\\_09wDh34vA4JRAgd](https://okstateches.az1.qualtrics.com/jfe/form/SV_09wDh34vA4JRAgd)

Your participation will be voluntary, highly appreciated and valued. If you have any questions about your rights as a participant, contact the primary investigator at [mdhasan@okstate.edu](mailto:mdhasan@okstate.edu), the faculty advisor for this project at [cosette.armstrong@okstate.edu](mailto:cosette.armstrong@okstate.edu), or the OSU Institutional Review Board (IRB) office at 223 Scott Hall, Stillwater, Ok-74078, 405-744-3377, [irb@okstate.edu](mailto:irb@okstate.edu)

Thank you for your patience and assistance.

**Warm regards,**

Md Anamul Hasan

Graduate Student, Dept. of Design, Housing & Merchandising

Oklahoma State University

Email: [mdhasan@okstate.edu](mailto:mdhasan@okstate.edu)

## **Appendix B**

### **PARTICIPANT INFORMATION OKLAHOMA STATE UNIVERSITY [TO BE INCLUDED IN ONLINE SURVEY]**

**Title:** Examining Style Consumption in the context of Product Longevity.

**Investigator(s):** Md Anamul Hasan, DHM, Oklahoma State University, Primary investigator.  
Cosette M. Joyner Armstrong, DHM, Oklahoma State University, Faculty advisor.

**Purpose:** The purpose of this study was to develop an understanding of style consumption by investigating consumption behavior in which consumers report product longevity with their clothing.

**What to Expect:** You will participate in an interview that will consume no more than 60 minutes of your time. There was no follow-up after the interview.

**Benefits/Risks:** There are no risks associated with this project which are expected to be greater than those ordinarily encountered in daily life. There are no direct benefits to you. However, you may gain an appreciation and understanding of how research is conducted.

**Compensation:** There would be 15-20 participants, and one participant will be rewarded a \$50 check through a random drawing. The drawing will occur in June, 2018.

**Your Rights and Confidentiality:** Your participation in this research is voluntary. There is no penalty for refusal to participate. The interview was audio recorded and a laptop will convert your verbal speech into text file. None of the audio recordings and text file will have your name or any personal identifiable information. The audio recording and text file was stored both in the PIs' and advisors' password-protected laptop. Your name, email, demographic information and your consent is being recorded now in this survey, and this information is accessed by the researcher and his faculty advisor. The identifiers were deleted when the project was finished. The project will end in December, 2018.

**Contacts:** You may contact the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: Md Anamul Hasan, Human Science, Dept. of Design, Housing and Merchandising, Oklahoma State University, Stillwater, OK 74078, 405-762-3925 or Cosette Armstrong, Ph.D., Human Sciences, Dept. of Design, Housing and Merchandising, Oklahoma State University, Stillwater, OK 74078, 405-744-9525. If you have questions about your rights as a research volunteer, you may contact the IRB Office at 223 Scott Hall, Stillwater, OK 74078, 405-744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu)

## Appendix C

### Survey Questions

Indicate your consent to be a participant in the interview.

☐ I consent

Page Break.....

Q1 Your **first name** and **last initial**:

Q2 Your **email address**: (You was notified via this email if you win the drawing)

Q3 Your **gender**:

☐ Male

☐ Female

☐ Gender non-binary

☐ I prefer not to answer

Q4 Your **age**:

Q5 Your **ethnicity**:

☐ Hispanic or Latino

☐ Black or African American

☐ White American

☐ Asian

☐ Native Americans

☐ Other

☐ I prefer not to answer.

**Q7 Your annual personal income:**

- ☐ Less than \$10,000
- ☐ \$10,000 - \$29,999
- ☐ \$30,000 - \$49,999
- ☐ \$50,000 - \$69,999
- ☐ \$70,000 - \$89,999
- ☐ More than \$90,000
- ☐ I prefer not to answer

Click the arrow below to be directed to the calendar system to schedule your interview appointment. Provide your first name, last initial, and phone number where you wish to be contacted.



## Appendix D

### Tracking participants' demographic information

<b>Participant</b>	<b>Gender</b>	<b>Age</b>	<b>Ethnicity</b>	<b>Annual income</b>
Participant A	Female	62	White American	\$50,000 - \$69,999
Participant B	Female	62	White American	\$50,000 - \$69,999
Participant C	Female	22	Native Americans	Less than \$10,000
Participant D	Male	25	Asian	\$30,000 - \$49,999
Participant E	Female	29	White American	\$10,000 - \$29,999
Participant F	Female	30	White American	\$10,000 - \$29,999
Participant G	Male	19	White American	Less than \$10,000
Participant H	Male	31	White American	\$10,000 - \$29,999
Participant I	Female	50	Native Americans	\$30,000 - \$49,999
Participant J	Female	57	White American	\$50,000 - \$69,999
Participant K	Female	27	White American	\$10,000 - \$29,999
Participant L	Male	24	Native Americans	Less than \$10,000
Participant M	Male	23	White American	I prefer not to answer
Participant N	Male	39	Asian	\$70,000 - \$89,999
Participant O	Male	30	Asian	\$10,000 - \$29,999
Participant P	Male	18	Black/African American	Less than \$10,000
Participant Q	Female	45	White American	More than \$90,000
Participant R	Female	63	White American	I prefer not to answer
Participant S	Male	27	Asian	\$10,000 - \$29,999
Participant T	Female	Null	I prefer not to answer	I prefer not to answer

## Appendix E

### IRB Approval Letter

#### Oklahoma State University Institutional Review Board

Date: Wednesday, January 3, 2018  
IRB Application No: HE1773  
Proposal Title: Examining Style Consumption In the context of Product Longevity.

Reviewed and  
Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 1/2/2021

Principal  
Investigator(s):

Md Anamul Hasan	Cosette M. Armstrong
	437 HS
Stillwater, OK 74078	Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

☐ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.

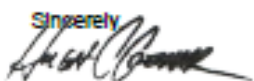
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.

3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and

4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Scott Hall (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,



Hugh Crethar, Chair  
Institutional Review Board

## Appendix F

### Documentation of Awarding Participant



### Documentation of Payment to A Research Participant

Research Project Title	Examining Style Consumption in the context of Product Longevity.
Name of PI	Md Anamul Hasan

July 08, 2018

I, Md Ibrahim, by signing below, I hereby confirm that I have received the \$50 cash incentive from the primary investigator, Md Anamul Hasan for participating in his study.

*Md Anamul Hasan*

.....

Md Anamul Hasan  
Primary Investigator  
Design, Housing, and  
Merchandising  
Oklahoma State University

*[Signature]*

.....

Md Ibrahim

*[Signature]*

Ashley Williams  
Admin. Associate  
Design, Housing and  
Merchandising  
Oklahoma State University

Amount Paid by

Amount Paid to

Amount paid in the  
presence of

## VITA

Md Anamul Hasan

Candidate for the Degree of

Master of Science

Thesis: EXAMINING STYLE CONSUMPTION IN THE CONTEXT OF PRODUCT LONGEVITY

Major Field: Design, Housing, and Merchandising

Biographical:

Education:

Completed the requirements for the Master of Science in Design, Housing, and Merchandising at Oklahoma State University, Stillwater, Oklahoma in July, 2018.

Completed the requirements for the Bachelor of Science in Textile Engineering at Bangladesh University of Textiles, Dhaka, Bangladesh in 2015.

Experience:

Graduate teaching & research assistant (2016 – 2018)

Dept. of Design, Housing and Merchandising

Oklahoma State University, Stillwater, Oklahoma.

- Instruct students about different types of textile tests including: fiber identification; yarn specification; fabric structure and design (woven, knit and non-woven), dyeing, printing and finishing of fabric.
- Grading and student's performance analysis.
- Textile materials and logistic handling in the textile lab.

Professional Memberships:

International Textile and Apparel Association.